

OCT 04 2006

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## MAIN FILE

LDEQ

October 4, 2006

2003-1058-05

Mr. Bijan Sharafkhani  
Louisiana Dept. of Environmental Quality  
Administrator, Waste Permits Division  
P.O. Box 4313  
Baton Rouge, LA 70821-4313

original to IOHW

8m  
copy to HW/G2/Williams  
AVG

RE: Exide Technologies Baton Rouge Facility  
✓ AI 1396, PER 20030001  
LAD 008 184 137  
Responses to NOD dated August 25, 2006

Dear Mr. Sharafkhani:

Enclosed for your review are one (1) original and three (3) copies of responses to the Notice of Deficiency (NOD) dated August 25, 2006 for the Exide facility in Baton Rouge, Louisiana. The NOD was received by Exide on September 6, 2006. The NOD provides comments on a previous Response to NOD dated October 20, 2005 for the Hazardous Waste Renewal Application dated May 5, 2003 and Revised Responses to NOD for the Class 3 Permit Modification Request dated July 23, 2003.

A summary of LDEQ's comment followed by our response are provided below to ease review.

**Comment 1: LAC 33:V.517.A**

**The Applicant must include all changes at the facility since the original permit application was submitted (i.e., a revised closure plan and closure cost estimates, a revised contingency plan, the upgrades to the containment building, the dust suppression plan, etc.). In addition, the K069/D008 storage area is still in use. The operations of this area have not ceased nor has this area been closed in accordance with the approved closure plan. The Applicant must revise the portions of the application to reflect the current operating status and revise all plans to reflect that the K069/D008 unit is in operation.**

Response: Section 517.A has been revised to include all known revisions to the various plans used by the facility.

Figures 4, 5A, 14 and 17; Figure 3 of Appendix 6; and Figure 1 of Appendix 8;

have been revised to show the K069/D008 Storage Area, the permitted portion of the Containment Building and accurate limits of the Truck/Trailer Storage Area.

Figure 6 and Figure 2 of Appendix 8 have been revised to include the K069/D008 Storage Area and permitted portion of Containment Building.

Figure 1 has been revised to include the K069/D008 Storage Area. Figure 11 has also been resubmitted.

The permit application text has been revised in the following sections to include the K069/D008 Storage Area as an active area:

- IT Questions I.1.c, I.2.b and Attachment 1;
- Part A form;
- Chapter 516.A.1, 516.A.2, 516.A.3, 516.A.4, 516.A.5, 517.A, 517.B.13, 517.J.1, 517.J.2, 517.J.3, 517.M, 517.T.a, 517.T.7.b.iii, 521.A.1, 521.A.2, 521.A.3, 521.A.4, 521.B.1, and 521.B.2;
- Chapter 1501.A, 1503.A.2, and 1503.B.1;
- Chapter 1759.C.4.c;
- Chapter 1803.B.2;
- Chapter 2109.B, and 2111.A;
- Chapter 3301.A;
- Chapter 3509.A, and 3511.A;
- Chapter 5119.B;
- Appendix 6, Section 1.7; and,
- Appendix 15, Section 2.0.

**Comment 2: LAC 33:V.521.A.3**    **The Applicant's response to this requirement was that "The K069/D008 storage area identified in the 1993 Permit is no longer utilized by the facility for the management of hazardous waste". The applicant states, "Because the area is already closed, references to the K069/D008 Storage Area in the Hazardous Waste Permit Renewal Application and its attachments have been revised to remove reference to the unit, except to the extent that is discussed as a formerly permitted unit".**

**The K069/D008 Storage Area is not closed and the Applicant must revise the application and responses to include the use, operations, and capacity of this permitted unit.**

**Response:**    Please see response to Comment 1 for changes made regarding the K069/D008 Storage Area.

## **ENGINEERING DIVISION COMMENTS**

**Comment 3: LAC 33:V.517.T.3.f** There is a lack of consistency of drawn maps 2003-1058-03-05, 2003-1058-03-06, and 2003-1058-03-13. The Applicant must consistently represent the Truck/Trailer Storage Area in all drawings where that area is shown.

**Response:** As noted in the response to Comment 1, Figures 4, 5A, 14 and 17; Figure 3 of Appendix 6; and Figure 1 of Appendix 8; have been revised to consistently represent the perimeter of the Truck/Trailer Storage Area.

**Comment 4: LAC 33:V.Chapter 18, Page 18-2 and Chapter 41, Page 41-12**

**In Chapter 18, page 18-2 states that purchased scrap is stored in Area 1. In Chapter 41, page 41-12 states that no scrap metal is received and the exemption does not apply. The Applicant must consistently use terms throughout the document. Unless otherwise demonstrated, the Applicant must apply the exemption for recycling scrap metal in LAC 33:V.4117.A and explain such in the renewal application.**

**Response:** Exide does not recycle scrap metal, but does purchase iron scrap for use as furnace feed material. Chapter 1801A.1 has been revised to indicate that Exide purchases iron scrap for use as furnace feed material, and not for recycling. Chapters 4105.B.4 and 4117.A have been revised to indicate that Exide purchases scrap iron only for use as furnace feed stock. Exide does not recycle scrap metal; therefore, the exemption in Chapter 41 applies.

**Comment 5: LAC 33:V.2111** (Pages 21-7 through 11 were not in my package.) The container storage areas was described in insufficient terms, including square footage, volume of waste and date the area was constructed or last modified. The Applicant must describe the container storage areas in sufficient details to address all of LAC 33:V.2111, including the above items.

**Response:** As requested all pages of a section are included. Sufficient details to address 2111 have been provided.

**Comment 6: LAC 33:V.2245.K** The Waste Minimization Plan recognizes the handling of Off-Spec Salt, but does not identify the processing of battery acid into salt, which has become a byproduct rather than neutralized waste discharged to the environment. The Applicant should identify the processing of the battery acid into a saleable byproduct.

Response: Sections 2.0 and 4.2 of the Waste Minimization Plan (Appendix 15) have been revised to indicate that sulfuric acid is neutralized and crystallized to form a sodium sulfate salt that is sold as a product to a broker who sells the salt to others. Please note that sodium sulfate salt which meets specifications is not included in Table 1 of the Waste Minimization Plan as this material is considered a product, and not a waste.

**Comment 7: LAC 33:V.3507      The Revised Facility Closure Plan, dated October 2005, Sections 3.2, 3.3, 3.4 and 3.5 references that samples will be taken and analyzed to determine if the decontamination process is completed. The Applicant must cross-reference Section 3.6 to identify the standards that apply to the decontamination process.**

Response: Sections 3.2, 3.3, 3.4, 3.5 and 3.6 of the Facility Closure Plan (Appendix 8) have been revised to indicate that samples will be analyzed and compared to the performance standards provided in Section 3.7 to determine if decontamination is complete.

**The Revised Facility Closure Plan, dated October 2005, Sections 3.6 identifies the listing of substances analyzed and the performance standards for decontamination clearance. The Applicant must include leachable tests for chlorides and sulfates as performance standards for soil samples taken beneath the concrete floor areas.**

Response: The Facility Closure Plan (Appendix 8) and Chapter 3509.A has been updated to include total sulfate analysis for soil samples taken beneath the concrete floor. As the LDEQ Risk Evaluation/Corrective Action Program (RECAP) does not have a soil Screening Option standard for sulfate, the performance standard for total sulfate will be a background standard determined at the time of closure. The background performance standard will be determined for an industrial scenario in accordance with RECAP. The background standard will be applied as the Screening Option standard. Four soil samples will be collected from nearby areas at similar elevation for total sulfate analysis to calculate the background standard. As RECAP only provides performance standards in terms of total concentration, leachable sulfate has not been included as a leachable background standard cannot be calculated using RECAP.

Chloride analysis is not applicable to the facility as the waste material managed at the facility does not include chloride.

**Comment 8: LAC 33:V.3507      The Revised Facility Closure Plan, dated October 2005, Sections 3.6 identifies the listing of substances analyzed**



**and the performance standards for decontamination clearance. The facility must explain in detail why a pH performance standard of 2.0 is acceptable for decontamination clearance of soil samples. The explanation must include applicable citations of the Code of Federal Regulations (CFR) (40 CFR 264.110) and the Louisiana Administrative Code (LAC) (LAC 33:V.Chapter 35) or documents issued by the Environmental Protection Agency (EPA) or the Louisiana Department of Environmental Quality (LDEQ).**

Response: The pH performance standards for soil samples has been revised in the Facility Closure Plan and Chapter 3509.A to be 6.0 to 10.0 pH units. These standards are consistent with the applicable discharge limits listed in the facility LPDES permit No. LA0004464.

In addition, we have summarized all other changes made for accuracy and consistency between the application text, figures, and appendices as follows:

1. The scale on Figures 5A and 5B has been corrected.
2. Chapter 501.B, 501.C, 507.C and 513.A.1 have been updated to indicate that the designated Plant Manager is a duly authorized officer of Exide and will sign all documents associated with the application.
3. The Part A form and Chapter 515.14 have been updated to reflect current facility permit information.
4. The Part A form history has been updated to include the October 17, 2001 Class 3 Permit Modification and July 23, 2003 and October 28, 2003 Responses to Comments regarding that application.
5. The Facility Closure Plan has been updated to include laboratory fees for all analytes required by Section 3.7 and to remove duplicate costs for decontamination water analysis.
6. The existing application text describes dimensions of the Whole Battery Storage Area as 75 ft by 100 ft. Based upon field inspection and review of drawings submitted, the actual size of the Whole Battery Storage area has always been 75 ft by 160 ft. An expansion of the building has not been conducted. The following sections were changed to reflect the correct size of the Whole Battery Storage Area (75 ft by 160ft) with a maximum storage capacity of 121,500 batteries. The figures in the application reflect the correct size.

- IT Questions I.2.b;

- Part A form;
  - Chapter 517.B.13, 521.A.1, and 521.A.3;
  - Chapter 2101, 2109.B, and 2111.B.3;
  - Chapter 3511.B.3;
  - Appendix 8, Section 3.6, 4.0, Table 1, and Table 1E; and
  - Appendix 24, Section 4.2.B.1.
7. Chapter 517.J.7 and 517.T.7.b.ii were revised to include text previously submitted with the Responses to Comments on the Class 3 Modification Application.
  8. Chapter 1529.B.11 has been revised to indicate that the closure cost estimate has been adjusted for inflation to 2006 costs.
  9. A recently received Army Corp of Engineers wetlands determination letter is provided for Appendix 21.
  10. The requirements of the Spill Prevention Control & Countermeasure Plan (Appendix 14) and Stormwater Pollution Prevention Plan (Appendix 24) have been incorporated into the RCRA Contingency Plan and Emergency Response Plan. Appendices 14 and 24 have been removed from the application. The change has also been reflected in Chapters 517.A, 517.J.5, 1121, 1505.C.1, 1505.C.2, 1509.A, 1511.B, 1513.B.2, 4003.F, 4013, 4013.D.4, and 4107.A and Appendix 13.
  11. IT Question introductory paragraph, I.1, I.2.a, I.2.b, and I.2.c have been revised to simplify the response provided, to provide positive impacts to the environment, to indicate that used oil is recycled by a commercial recycler; to remove references to the billet machine and to remove language that the Containment Building is interim status.
  12. Chapter 501.A has been modified to indicate that the renewal application assumes that the containment building will be permitted as part of this submittal and approval by LDEQ.
  13. Chapter 515.14.i has been updated to include Title V Part 70 permit 08400000400V0 (effective October 5, 2005).
  14. Chapters 516.B and 516.C have been revised to remove text that RFI activities have not begun as comments or approval have not been received from LDEQ.
  15. Chapter 517.A has been revised to remove text indicating that raw materials are purchased off-site and to remove text regarding the billet casting machine.
  16. Chapter 517.B.7 has been revised to remove text regarding security guard remote access to gates.

17. Chapter 517.B.13 has been revised to remove language that the Containment Building is interim status.
18. Chapter 517.J.3, 517.J.4 and 521.A.2 have been revised to indicate that liquid removed from the Containment Building Area 2 sump is sent to the battery breaking operation.
19. Chapter 517.J.5 has been revised to remove Outfall 001 and 002 and to provide the correct air permit number.
20. Chapter 517.J.7, 517.J.8, 517.L, 1121 have been revised to simplify the language provided.
21. Chapter 517.J.9 has been revised to indicate that the Containment Building is under partial negative pressure.
22. Chapter 517.L has been revised to remove the positions of Wastewater Treatment Plant Supervisor, Bag House Supervisor, and Slag Stabilization Supervisor.
23. Chapter 1119 has been revised to indicate that the Training Manual will be updated as needed to maintain safety and environmental compliance. Plan revisions will be maintained at the Site.
24. Chapter 1503.B.2 has been revised to add Hurricane Andrew.
25. Chapter 1529.B.13 has been revised to indicate that paint waste is disposed off-site.
26. Chapter 3301.A has been revised to correct the effective date of the Post-Closure Permit for the closed hazardous waste piles.
27. Chapter 4105.C.3 has been revised to correct a typographical error.
28. Appendix 15, Waste Minimization Plan, and Chapter 1529.B.19 have been revised to remove the plan goals. Appendix 15 has also been revised to add that oil, light bulbs, and scrap metals are recovered by commercial facilities, and how paint waste is minimized. Table 1 of Appendix 15 has been revised to reflect to placement of waste materials.
29. Figure 1 has been revised to change 'unacceptable waste' to 'non-conforming waste'. Reverb slag and destination for clean acid and neutralized acid have been added.
30. The billet caster has been removed from Figure 6 and Figure 2 in Appendix 8.

31. The Recycle Water Tank was removed and the Permitted Slag Stabilization Area boundary was corrected in Figure 4, 5A, 14, 17 and Figure 1 of Appendix 8.
32. Outfall 002 was removed and the Industrial Sump and Industrial Battery Breaking Area were added to Figure 5A.
33. The phosphorus storage and truck scale locations were corrected; the Industrial Sump, Industrial Battery Breaking Area, spill kit, drainage patterns and discharge locations were added; and the Recycle Water Storage Tank and an assembly area were removed from Figure 3 in Appendix 6. Figure 3 in Appendix 6 was also renamed as Storage Tank Locations, Site Drainage, and Stormwater Discharge Location.
34. Chapter 517.J.9 has been revised to indicate that air from the Containment Building is managed by the baghouses.

If you should have any questions, please contact Edward Hardy at (225) 775-3040 ext. 132.

Sincerely,

EXIDE TECHNOLOGIES



Tim Harris  
Plant Manager

Cc: Karla Vidrine – LDEQ Waste Permits, P.O. Box 4313, Baton Rouge, LA 70821-4313  
Fred Ganster - Exide Environmental, Health and Safety Director North America  
Jen DiJoseph – Advanced GeoServices

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## **IT QUESTIONS**

## REVISED EXPANDED "IT DECISION" QUESTIONS

Environmental permit application modifications (both new and existing facilities) are required to provide relevant information in response to questions commonly referred to as "IT Questions", which address the potential for facilities to adversely impact the human and natural environment in the vicinity of the proposed or existing facility. These responses must be considered by the Louisiana Department of Environmental Quality, LDEQ, during the decision-making process on environmental permits pursuant to the Louisiana Supreme Court decision in the case of Save Our Selves, Inc. vs. Louisiana Environmental Control Commission. While this ruling was designed to address impacts associated with new facilities, existing facilities must consider the impact of continued operations versus the impacts of constructing a new facility at a different location. Exide Technologies, (Exide) Baton Rouge Smelter has been operating in East Baton Rouge Parish since 1969. The following responses demonstrate that potential adverse environmental impacts resulting from continued operation of the facility have been appropriately addressed.

**I. Have the potential and real adverse environmental effects of the proposed facility been avoided to the maximum extent possible?**

The Exide Baton Rouge Smelter is an existing recycling facility, where spent lead-acid batteries and lesser quantities of other lead-bearing materials are processed to recover their lead content. This facility has been in operation since 1969.

The facility includes a hazardous waste Containment Building that is currently regulated under interim status provisions of the LDEQ Regulation, and is in compliance with all applicable regulations. A permit modification including upgrades to portions of the Containment Building that will provide for further protection of the environment was submitted to LDEQ on October 17, 2001. Exide is responding to comments on that permit modification submittal received from the LDEQ on March 18, 2003. LDEQ has not yet approved the permit modification. This submittal requests a renewal of the hazardous waste permit and includes the Containment Building as a RCRA permitted unit.

The potential and real adverse environmental effects of the hazardous waste Containment Building have been avoided to the maximum extent, by the design of the facility and by its operation and maintenance programs.

In an effort to control adverse environmental impact and to comply with environmental, health and safety regulations, Exide has developed several compliance programs at the Baton Rouge facility including:

- A detailed personnel training program, outlined in the Training Manual lists all required training for health, safety and environmental training required, Hazardous Communications, Work

Practice Controls, Personal Protective Equipment, Chemical Handling, and Emergency Response and Spill Prevention.

- A spill prevention program, detailed in the Spill Prevention Control and Countermeasure Plan (SPCC) that outlines activities to be followed to reduce the potential for spills or release of hazardous materials.
- A waste screening program specified in the Waste Analysis Plan, that outlines the requirements for receiving material at the Baton Rouge smelter. This program helps to insure that the facility receives only material listed in our operating permit.
- An emergency response program specified in our RCRA Contingency Plan and Emergency Response Plan (CP). This program specifies emergency procedures that will be followed in the event of a fire, accident, environmental release or natural disaster.

**What are the potential environmental impacts of the permittee's proposed facility?**

The Baton Rouge recycling operation provides a positive impact to the environment by recovering spent/waste lead that otherwise needed to be disposed in landfills as well as reducing the demand for mining virgin lead.

The Exide Baton Rouge facility is a secondary lead smelter and refinery, which recycles spent lead-acid batteries and inorganic lead-bearing wastes into metallic lead, in the form of lead pig and block ingots, which are sold as products.

**1. What wastes will be handled?**

Exide receives lead containing materials classified as hazardous, non-hazardous, and exempt materials that are recycled on site. The materials recycled at the Baton Rouge smelter are spent lead-acid batteries, including automotive batteries, military batteries and large industrial batteries, lead-bearing scrap generated in the battery manufacturing process, purchased lead-bearing drosses, lead scrap, firing range sands, material from lead paint remediation projects and other lead-bearing material that meets the Exide screening criteria as outlined in the Waste Analysis Plan. The Waste Analysis Plan outlines the requirements for receiving material at the Baton Rouge smelter.



Exide does not accept any material that contains organic constituents, PCBs, organic lead, or metallic aluminum. Additionally, material is not accepted that contains any free liquids.

As a part of the recycling process, the facility generates waste. Generated wastes include baghouse dust, refractory brick, spent personal protective equipment, blast furnace slag, used oil, nickel-cadmium batteries, and spent solvent from parts washing operations.

**a. Classes of chemicals**

Exide handles characteristic hazardous waste (D008, D002, D004, D006, D007, D010, and D011), listed hazardous waste (K069), and industrial solid waste (exempt lead-bearing material for recycling). The classes of chemicals are solid inorganic metals, including lead-bearing wastes.

**b. Quantities (hazardous and non hazardous)**

Exide handles approximately 330,000 tons of hazardous and non-hazardous waste annually.

The facility receives approximately 25,000 tons of hazardous waste lead-bearing material in drums, including 1,000 tons with other metals in addition to lead. The facility generates approximately 20,000 tons per year of hazardous blast furnace slag. The facility also generates approximately 1,000 tons per year of hazardous emission control dust that are recycled on site.

Approximately 250,000 tons of spent lead-acid batteries are received by the facility. Approximately 30,000 tons of non-hazardous recyclable lead-bearing material in drums is received per year.

**c. Physical and chemical characteristics**

Lead-acid batteries are constructed of a plastic case, conductive plates (metallic lead grids coated with lead oxide paste), separators, a sulfuric acid/water electrolyte solution, and metallic lead posts or terminals. Industrial and military batteries are constructed in the same manner, except that the casing is made of different material and the size of the batteries is greater. During the recycling process, the batteries are broken and segregated into plastic, acid and lead bearing materials. The lead bearing materials include grids, plates and lead-oxide paste.

The battery plant scrap, received from either other Exide facilities or from other customers, is typically in the form of metallic lead that has been stamped into grids, lead oxide paste and battery plates. The grids are solid metal and are recycled. The lead oxide paste is generated on-site during the battery breaking process. The paste is a solid material, typically with a moisture content of less than 5%, with the potential to contain free liquid. It is reddish brown in color and has a very high density. The lead oxide is placed in feed piles and smelted in the reverberatory furnace. The battery plates received are grids that have been pasted with lead oxide. They are solid, with a very high density and low moisture content. The plates are typically recycled in the blast furnace.

The Baton Rouge smelter also receives lead dross and baghouse dust from both Exide facilities and other customers. Lead dross is a solid material generated by the melting of metallic lead. The dross is composed primarily of lead with trace metals such as arsenic and antimony. The baghouse dust is a dry powdery solid that contains primarily lead with other trace metals. Both the dross and dust are stored in feed piles and recycled in the furnaces.

Exide periodically receives shipment of metallic lead scrap for recycling. This material is usually in the form of wheel weights, lead pipe or other scrap lead metal. This material is recycled.

Other recyclable materials received by the Baton Rouge smelter include lead-bearing ceramics, spent pasting boards and lead scrap from firing range remediation. The Baton Rouge Smelter no longer recycles paint chips or organic lead waste and it is unlikely that these materials will be processed at the facility in the future.

As part of the lead recycling, a blast furnace slag is generated. The blast furnace slag exits the furnace in a molten state and is cast into iron pots. The slag solidifies and is cooled to room temperature. It is then dumped from the pots, broken up and separated for either further recycling or stabilization and disposal.

The blast furnace slag is characteristically hazardous because it leaches lead, when subjected to TCLP testing, at concentrations greater than the regulatory threshold limit of 5 mg/L. The slag is rock-like in physical appearance and engineering properties. The chemical composition of the

blast furnace slag is 30-35% iron oxide (FeO), 25-30% silicon dioxide (SiO<sub>2</sub>), 15-35% calcium oxide (CaO), and less than 0.5% lead (Pb). The specific gravity of the stabilized blast furnace slag as deposited in the on-site landfill is approximately 1.3 tons/cubic yard. The slag melting point is 2100 to 2400°F. The slag is neither ignitable, corrosive, nor reactive.

Additional wastes generated by the Baton Rouge smelter include used oil, refractory bricks, and spent nickel-cadmium batteries.

**d. Hazardous waste classification (listed, characteristic, etc.)**

Exide handles characteristic hazardous waste (D008, D002, D004, D006, D007, D010, and D011), listed hazardous waste (K069), and industrial solid waste (exempt lead-bearing material for recycling).

**2. How will they be handled?**

Generally, material is received by Exide at the receiving area where it is inspected and sampled if required. Material is stored in designated areas based upon the material type

Lead-acid batteries arriving in tractor-trailers are weighed in, and sent to the Battery Breaker Unit. Typically, the batteries are unloaded and immediately processed by the breaker unit. The batteries are loaded onto the unit where they are broken down into component parts. The sulfuric acid is neutralized and crystallized to form a sodium sulfate salt that is sold as a product to a broker who sells the salt to others. There is a thriving industrial marketplace for sodium sulfate salt. Sodium sulfate salt has many industrial uses including as a bleaching agent in pulp and paper production and as an ingredient in laundry detergent. The plastic from the battery casings is washed and shipped off-site to make new batteries. The lead paste is recycled on-site to produce metallic lead for making new batteries.

If the batteries are not immediately recycled, they are stored in two permitted storage areas.

The majority of other recyclable materials such as battery plates, lead oxide, metallic lead, drosses, baghouse dust, metallic lead waste and scrap are received in either in steel drums or Gaylord boxes. The material is weighed in at the Exide scale and sent to the loading dock to be unloaded. Drums are taken to the feed pile area where they are dumped and the contents inspected. The empty drums are washed, crushed and sent off-site to be recycled. The lead-bearing material is processed in the blast furnace or the reverberatory (reverb) furnace. Slag generated by the reverb furnace is then refined to further recover lead.

The blast furnace slag, generated as part of the lead recycling process is broken up and separated for either further recycling or stabilization and disposal. Visual and chemical analyses are used to separate the slag into fractions. One portion, the recyclable fraction, is returned to the furnace and re-smelted to further recover lead. The other portion, the disposal fraction, does not have enough lead content for further recycling. It is stored in a separate area, stabilized and disposed on-site.

The disposal portion of the blast furnace slag is treated with Portland cement and sodium silicate in the slag stabilization unit. A sample of the stabilized slag is collected and sent to a contract laboratory for Toxicity Characteristic Leaching Potential (TCLP) toxicity analysis in accordance with EPA approved procedures. This stabilized slag is disposed of in Exide's permitted on-site solid waste landfill. The recycled lead is shipped off-site as ingots, blocks, or billets.

Used oil is stored in an onsite tank for recovery by a commercial recycler who recycles it for reuse. Refractory brick generated from repairs to furnaces onsite is either recycled onsite or shipped off-site for proper disposal. Nickel-cadmium batteries cannot be recycled by Exide. They are sent to a permitted nickel-cadmium recycling facility.

Any accidental spills will be immediately remediated according to the SPCC, and the wash water will be directed to the wastewater treatment plant prior to discharge.

Figure 1 provides a flow diagram showing the reclamation process utilized by Exide.

**a. Treatment**

Exide recycles the lead from spent batteries and other lead-bearing materials for reuse. The recycled lead is shipped off-site as ingots, or blocks.

The only waste that is treated is blast furnace slag. Treatment involves crushing the slag into small diameter particles and chemical stabilizing it using Portland cement and sodium silicate rendering it a non-hazardous industrial waste.

As previously discussed, a sample of the stabilized slag is collected and sent to a contract laboratory for TCLP toxicity analysis in accordance with EPA approved procedures. The slag is disposed in Exide's permitted on-site industrial/construction debris solid waste landfill.

**b. Storage**

Exide stores hazardous waste on-site within four areas. Materials are stored in their designated areas in accordance with applicable state and federal regulations.

1. The Truck/Trailer Storage Area is used to hold spent batteries in trailer. It has a permitted capacity 85,000 batteries. It has a surface area of 120 ft by 120 ft, or 14,400 square feet.
2. The Whole Battery Storage Area is used to hold batteries on pallets. It has a permitted capacity of 121,500 batteries. It has a surface area of 75 ft by 160 ft, or 12,000 square feet.
3. The K069/D008 Storage Area is used to hold drums of listed or characteristic hazardous waste. It has a permitted capacity of 544 drums. It has a surface area of 25 ft by 70 ft, or 1,750 square feet.
4. The Containment Building is used to hold lead-bearing raw materials prior to recycling. The building has an engineered capacity of 3,333 tons of blast furnace slag that is stored prior to on-site stabilization and disposal. The surface area for blast furnace slag storage is 5,965 square feet. Additionally, the building has the capability to hold 12,080 tons of lead material for recycling, including battery plates, lead oxide paste, reverberatory furnace slag, lead dross,

and purchased scrap. The surface area for storage of these materials is 15,100 square feet.

These areas are maintained to meet all applicable environmental regulatory requirements. The purpose of this hazardous waste permit application is to renew the existing hazardous waste permit.

**c. Disposal**

Exide does not dispose of any hazardous waste on-site. All hazardous waste is disposed of off-site at an approved disposal facility. Incoming hazardous materials that do not meet the incoming material strict screening process are returned to the material generator or disposed of off-site at an approved facility.

Exide occasionally generates hazardous wastes D006/D008 (refractory bricks) from maintenance and/or replacement of firebricks in the furnace inner lining. Refractory bricks that are generated are either recycled in the blast furnace or sent off-site to be disposed of in a permitted commercial hazardous waste landfill. The bricks are not stored prior to shipment off-site, but are taken out of the furnace and loaded directly onto a truck roll off container for off-site commercial disposal. If the bricks are to be recycled on-site, they are containerized for storage prior to recycle.

Exide also generates used motor oil that is recycled by a commercial oil recycler. Exide intermittently receives spent nickel-cadmium (D006) batteries intermingled with lead-acid batteries. The spent nickel-cadmium batteries are accumulated and stored in drums prior to shipment off-site to a permitted recycling facility.

Exide does generate stabilized blast furnace slag, a non-hazardous solid waste, which is disposed of on-site in a permitted solid waste landfill. The stabilized slag is sampled in accordance with the Waste Analysis Plan to ensure the waste meets federal and state non-hazardous waste regulations.

## ATTACHMENT 1

### Hazardous Waste Materials

Type Material	Code	Estimated Annual Quantity Handled
Spent Lead-Acid Batteries	D002, D008	250,000 tons
Lead residues, sludges, plant scraps & other Group I lead bearing hazardous waste	D008	24,000 tons
Lead residues, sludges, slags, and other Group I lead bearing hazardous waste with impurity-level other metal content	D008 (D004, D006, D007, D010, D011)	1,000 tons
Emission control dust from Secondary Lead Smelters	K069	1,000 tons
Group II Recyclable lead bearing non-hazardous materials	D008	30,000 tons
Refractory Brick (exempt from permit)	D006, D008	200 tons
Spent nickel-cadmium batteries	D006	250 tons
Battery Components	D008	125,000 tons
Blast Furnace Slag	D008	20,000 tons

**RESPONSE  
ATTACHMENT A**



<b>SEND COMPLETED FORM TO:</b> The Appropriate State or EPA Regional Office.	United States Environmental Protection Agency <b>RCRA SUBTITLE C SITE IDENTIFICATION FORM</b>										
<b>1. Reason for Submittal</b> (See instructions on page 14.)  MARK ALL BOX(ES) THAT APPLY	<b>Reason for Submittal:</b> <input type="checkbox"/> To provide Initial Notification of Regulated Waste Activity (to obtain an EPA ID Number for hazardous waste, universal waste, or used oil activities) <input type="checkbox"/> To provide Subsequent Notification of Regulated Waste Activity (to update site identification information) <input type="checkbox"/> As a component of a First RCRA Hazardous Waste Part A Permit Application <input checked="" type="checkbox"/> As a component of a Revised RCRA Hazardous Waste Part A Permit Application (Amendment # _____) <b>Permit Renewal</b> <input type="checkbox"/> As a component of the Hazardous Waste Report										
<b>2. Site EPA ID Number</b> (page 15)	<b>EPA ID Number</b> 1 L 1 A 1 D 1 1 0 1 0 1 8 1 1 1 8 1 4 1 1 1 3 1 7 1										
<b>3. Site Name</b> (page 15)	<b>Name:</b> Exide Technologies										
<b>4. Site Location Information</b> (page 15)	<b>Street Address:</b> 2400 Brooklawn Drive <b>City, Town, or Village:</b> Baton Rouge <b>State:</b> LA <b>County Name:</b> <b>Zip Code:</b> 70807-2400										
<b>5. Site Land Type</b> (page 15)	<b>Site Land Type:</b> <input checked="" type="checkbox"/> Private <input type="checkbox"/> County <input type="checkbox"/> District <input type="checkbox"/> Federal <input type="checkbox"/> Indian <input type="checkbox"/> Municipal <input type="checkbox"/> State <input type="checkbox"/> Other										
<b>6. North American Industry Classification System (NAICS) Code(s) for the Site</b> (page 15)	<table border="1"> <tr> <td> <b>A.</b>          1 3 1 3 1 1 4 9 1 2 1       </td> <td> <b>B.</b>          1 1 1 1 1 1 1 1 1 1 1       </td> </tr> <tr> <td> <b>C.</b>          1 1 1 1 1 1 1 1 1 1 1       </td> <td> <b>D.</b>          1 1 1 1 1 1 1 1 1 1 1       </td> </tr> </table>			<b>A.</b> 1 3 1 3 1 1 4 9 1 2 1	<b>B.</b> 1 1 1 1 1 1 1 1 1 1 1	<b>C.</b> 1 1 1 1 1 1 1 1 1 1 1	<b>D.</b> 1 1 1 1 1 1 1 1 1 1 1				
<b>A.</b> 1 3 1 3 1 1 4 9 1 2 1	<b>B.</b> 1 1 1 1 1 1 1 1 1 1 1										
<b>C.</b> 1 1 1 1 1 1 1 1 1 1 1	<b>D.</b> 1 1 1 1 1 1 1 1 1 1 1										
<b>7. Site Mailing Address</b> (page 16)	<b>Street or P. O. Box:</b> P.O. Box 74040 <b>City, Town, or Village:</b> Baton Rouge <b>State:</b> LA <b>Country:</b> USA <b>Zip Code:</b> 70874-4040										
<b>8. Site Contact Person</b> (page 16)	<table border="1"> <tr> <td> <b>First Name:</b> Tim       </td> <td> <b>MI:</b> </td> <td> <b>Last Name:</b> Harris       </td> </tr> <tr> <td colspan="2"> <b>Phone Number:</b> 225-775-3040 <b>Extension:</b> 157       </td> <td> <b>Email address:</b> Tim.Harris@exide.com       </td> </tr> </table>			<b>First Name:</b> Tim	<b>MI:</b>	<b>Last Name:</b> Harris	<b>Phone Number:</b> 225-775-3040 <b>Extension:</b> 157		<b>Email address:</b> Tim.Harris@exide.com		
<b>First Name:</b> Tim	<b>MI:</b>	<b>Last Name:</b> Harris									
<b>Phone Number:</b> 225-775-3040 <b>Extension:</b> 157		<b>Email address:</b> Tim.Harris@exide.com									
<b>9. Operator and Legal Owner of the Site</b> (pages 16 and 17)	<table border="1"> <tr> <td> <b>A. Name of Site's Operator:</b>          Exide Technologies       </td> <td> <b>Date Became Operator (mm/dd/yyyy):</b>          1995       </td> </tr> <tr> <td colspan="2"> <b>Operator Type:</b> <input checked="" type="checkbox"/> Private <input type="checkbox"/> County <input type="checkbox"/> District <input type="checkbox"/> Federal <input type="checkbox"/> Indian <input type="checkbox"/> Municipal <input type="checkbox"/> State <input type="checkbox"/> Other       </td> </tr> <tr> <td> <b>B. Name of Site's Legal Owner:</b>          Exide Technologies       </td> <td> <b>Date Became Owner (mm/dd/yyyy):</b>          1995       </td> </tr> <tr> <td colspan="2"> <b>Owner Type:</b> <input checked="" type="checkbox"/> Private <input type="checkbox"/> County <input type="checkbox"/> District <input type="checkbox"/> Federal <input type="checkbox"/> Indian <input type="checkbox"/> Municipal <input type="checkbox"/> State <input type="checkbox"/> Other       </td> </tr> </table>			<b>A. Name of Site's Operator:</b> Exide Technologies	<b>Date Became Operator (mm/dd/yyyy):</b> 1995	<b>Operator Type:</b> <input checked="" type="checkbox"/> Private <input type="checkbox"/> County <input type="checkbox"/> District <input type="checkbox"/> Federal <input type="checkbox"/> Indian <input type="checkbox"/> Municipal <input type="checkbox"/> State <input type="checkbox"/> Other		<b>B. Name of Site's Legal Owner:</b> Exide Technologies	<b>Date Became Owner (mm/dd/yyyy):</b> 1995	<b>Owner Type:</b> <input checked="" type="checkbox"/> Private <input type="checkbox"/> County <input type="checkbox"/> District <input type="checkbox"/> Federal <input type="checkbox"/> Indian <input type="checkbox"/> Municipal <input type="checkbox"/> State <input type="checkbox"/> Other	
<b>A. Name of Site's Operator:</b> Exide Technologies	<b>Date Became Operator (mm/dd/yyyy):</b> 1995										
<b>Operator Type:</b> <input checked="" type="checkbox"/> Private <input type="checkbox"/> County <input type="checkbox"/> District <input type="checkbox"/> Federal <input type="checkbox"/> Indian <input type="checkbox"/> Municipal <input type="checkbox"/> State <input type="checkbox"/> Other											
<b>B. Name of Site's Legal Owner:</b> Exide Technologies	<b>Date Became Owner (mm/dd/yyyy):</b> 1995										
<b>Owner Type:</b> <input checked="" type="checkbox"/> Private <input type="checkbox"/> County <input type="checkbox"/> District <input type="checkbox"/> Federal <input type="checkbox"/> Indian <input type="checkbox"/> Municipal <input type="checkbox"/> State <input type="checkbox"/> Other											

9. Legal Owner (Continued) Address	Street or P. O. Box: 13000 Deerfield Parkway, Suite 200	
	City, Town, or Village: Alpharetta	
	State: GA	
	Country: USA	Zip Code: 30004

## 10. Type of Regulated Waste Activity

Mark "Yes" or "No" for all activities; complete any additional boxes as instructed. (See instructions on pages 18 to 21.)

## A. Hazardous Waste Activities

Complete all parts for 1 through 6.

Y ☒ N ☐ 1. Generator of Hazardous Waste

If "Yes", choose only one of the following - a, b, or c.

☒ a. LQG: Greater than 1,000 kg/mo (2,200 lbs./mo.)  
of non-acute hazardous waste; or☐ b. SQG: 100 to 1,000 kg/mo (220 - 2,200 lbs./mo.)  
of non-acute hazardous waste; or☐ c. CESQG: Less than 100 kg/mo (220 lbs./mo.)  
of non-acute hazardous waste

In addition, indicate other generator activities.

Y ☐ N ☒ d. United States Importer of Hazardous WasteY ☐ N ☒ e. Mixed Waste (hazardous and radioactive) GeneratorY ☐ N ☒ 2. Transporter of Hazardous WasteY ☐ N ☐ 3. Treater, Storer, or Disposer of  
Hazardous Waste (at your site) Note:  
A hazardous waste permit is required for  
this activity.Y ☐ N ☐ 4. Recycler of Hazardous Waste (at your  
site)Y ☐ N ☐ 5. Exempt Boiler and/or Industrial  
Furnace

If "Yes", mark each that applies.

☐ a. Small Quantity On-site Burner  
Exemption☒ b. Smelting, Melting, and Refining  
Furnace ExemptionY ☐ N ☒ 6. Underground Injection Control

## B. Universal Waste Activities

Y ☐ N ☐ 1. Large Quantity Handler of Universal Waste (accumulate  
5,000 kg or more) [refer to your State regulations to  
determine what is regulated]. Indicate types of universal  
waste generated and/or accumulated at your site. If "Yes",  
mark all boxes that apply:

	Generate	Accumulate
a. Batteries	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Pesticides	<input type="checkbox"/>	<input type="checkbox"/>
c. Thermostats	<input type="checkbox"/>	<input type="checkbox"/>
d. Lamps	<input type="checkbox"/>	<input type="checkbox"/>
e. Other (specify) _____	<input type="checkbox"/>	<input type="checkbox"/>
f. Other (specify) _____	<input type="checkbox"/>	<input type="checkbox"/>
g. Other (specify) _____	<input type="checkbox"/>	<input type="checkbox"/>

Y ☐ N ☐ 2. Destination Facility for Universal Waste

Note: A hazardous waste permit may be required for this activity.

## C. Used Oil Activities

Mark all boxes that apply.

Y ☐ N ☒ 1. Used Oil Transporter  
If "Yes", mark each that applies.☐ a. Transporter  
☐ b. Transfer FacilityY ☐ N ☒ 2. Used Oil Processor and/or Re-refiner  
If "Yes", mark each that applies.☐ a. Processor  
☐ b. Re-refinerY ☐ N ☒ 3. Off-Specification Used Oil BurnerY ☐ N ☒ 4. Used Oil Fuel Marketer


If "Yes", mark each that applies.

☐ a. Marketer Who Directs Shipment of  
Off-Specification Used Oil to  
Off-Specification Used Oil Burner  
☐ b. Marketer Who First Claims the  
Used Oil Meets the Specifications

**A. Waste Codes for Federally Regulated Hazardous Wastes.** Please list the waste codes of the Federal hazardous wastes handled at your site. List them in the order they are presented in the regulations (e.g., D001, D003, F007, U112). Use an additional page if more spaces are needed.

D002	D004	D006	D007	D008	D010	D011
K069						


[illegible]

Signature of operator, owner, or an authorized representative	Name and Official Title (type or print)	Date Signed (mm/dd/yyyy)
	Tim Harris, Plant Manager	10/4/06

United States Environmental Protection Agency  
**HAZARDOUS WASTE PERMIT INFORMATION FORM**

1. Facility Permit Contact (See instructions on page 23)	First Name: <u>Tim</u>	MI:	Last Name: <u>Harris</u>
	Phone Number: <u>225-775-3040</u>		Phone Number Extension: <u>157</u>
2. Facility Permit Contact Mailing Address (See instructions on page 23)	Street or P.O. Box: <u>P.O. Box 74040</u>		
	City, Town, or Village: <u>Baton Rouge</u>		
	State: <u>LA</u>		
	Country: <u>USA</u>		Zip Code: <u>70874</u>
3. Operator Mailing Address and Telephone Number (See instructions on page 23)	Street or P.O. Box: <u>P.O. Box 74040</u>		
	City, Town, or Village: <u>Baton Rouge</u>		
	State: <u>LA</u>		
	Country: <u>USA</u>	Zip Code: <u>70874</u>	Phone Number: <u>225-775-3040</u>
Legal Owner Mailing Address and Telephone Number (See instructions on page 23)	Street or P.O. Box: <u>13000 Deerfield Parkway, Suite 200</u>		
	City, Town, or Village: <u>Alpharetta</u>		
	State: <u>GA</u>		
	Country: <u>USA</u>	Zip Code: <u>30004</u>	Phone Number: <u>678-566-9000</u>
5. Facility Existence Date (See instructions on page 24)	Facility Existence Date (mm/dd/yyyy): <u>01/01/1960</u>		
6. Other Environmental Permits (See instructions on page 24)			
A. Permit Type (Enter code)		B. Permit Number	
N		L A 0 0 0 4 4 6 4	
R		L A D 0 0 8 1 8 4 1 3 7	
P		0 8 4 0 0 0 0 0 4 0	
E		L A D 0 0 8 1 8 4 1 3 7	
E		G D 0 3 3 2 0 5 4 P 0326	
C. Description			
NPDES (effective 8/1/06)			
RCRA Hazardous Waste (effective 11/1/93)			
Air Permit (effective 10/5/05), Title V Part 70			
LDEQ Post-Closure Permit (Waste Piles #1, #2, effective 6/19/95)			
LDEQ Solid Waste Permit (effective 7/2/98)			
7. Nature of Business (Provide a brief description; see instructions on page 24)			
E G D 0 3 3 2 0 5 4 P 0160 LDEQ Solid Waste Permit (closed 1999)			
Secondary lead smelter and refiner which recycles spent lead acid batteries and other lead bearing materials into metallic lead ingots for use in batteries, ammunitions, weights, chemicals and other commercial products.			

6. (Cont'd)

E

2 2 0 3 3 0 0 0 4  
7 0 8 7 4Air Permit, Operating, Minor  
EP 313

## 8. Process Codes and Design Capacities (See instructions on page 24) - Enter information in the Sections on Form Page 3.

A. PROCESS CODE - Enter the code from the list of process codes in the table below that best describes each process to be used at the facility. Fifteen lines are provided for entering codes. If more lines are needed, attach a separate sheet of paper with the additional information. For "other" processes (i.e., D99, S99, T04 and X99), enter the process information in Item 9 (including a description).

B. PROCESS DESIGN CAPACITY - For each code entered in Section A, enter the capacity of the process.

1. AMOUNT - Enter the amount. In a case where design capacity is not applicable (such as in a closure/post-closure or enforcement action) enter the total amount of waste for that process.

2. UNIT OF MEASURE - For each amount entered in Section B(1), enter the code in Section B(2) from the list of unit of measure codes below that describes the unit of measure used. Select only from the units of measure in this list.

C. PROCESS TOTAL NUMBER OF UNITS - Enter the total number of units for each corresponding process code.

PROCESS CODE	PROCESS	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY	PROCESS CODE	PROCESS	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY
	<u>Disposal:</u>			<u>Treatment (continued):</u>	
D79	Underground Injection Well Disposal	Gallons; Liters; Gallons Per Day; or Liters Per Day	T81	Cement Kiln	For T81-T93:
D80	Landfill	Acre-feet; Hectare-meter; Acres; Cubic Meters; Hectares; Cubic Yards	T82	Lime Kiln	
D81	Land Treatment	Acres or Hectares	T83	Aggregate Kiln	Gallons Per Day; Liters Per Day; Pounds Per Hour; Short Tons Per Hour; Kilograms Per Hour; Metric Tons Per Day; Metric Tons Per Hour; Short Tons Per Day; Btu Per Hour; or Million Btu Per Hour
D82	Ocean Disposal	Gallons Per Day or Liters Per Day	T84	Phosphate Kiln	
D83	Surface Impoundment Disposal	Gallons; Liters; Cubic Meters; or Cubic Yards	T85	Coke Oven	
D99	Other Disposal	Any Unit of Measure in Code Table Below	T86	Blast Furnace	
	<u>Storage:</u>		T87	Smelting, Melting, or Refining Furnace	
S01	Container	Gallons; Liters; Cubic Meters; or Cubic Yards	T88	Titanium Dioxide Chloride Oxidation Reactor	
S02	Tank Storage	Gallons; Liters; Cubic Meters; or Cubic Yards	T89	Methane Reforming Furnace	
S03	Waste Pile	Cubic Yards or Cubic Meters	T90	Pulping Liquor Recovery Furnace	
S04	Surface Impoundment Storage	Gallons; Liters; Cubic Meters; or Cubic Yards	T91	Combustion Device Used In The Recovery Of Sulfur Values From Spent Sulfuric Acid	
S05	Drip Pad	Gallons; Liters; Acres; Cubic Meters; Hectares; or Cubic Yards	T92	Halogen Acid Furnaces	
S06	Containment Building Storage	Cubic Yards or Cubic Meters	T93	Other Industrial Furnaces Listed In 40 CFR §260.10	
S99	Other Storage	Any Unit of Measure in Code Table Below	T94	Containment Building - Treatment	Cubic Yards; Cubic Meters; Short Tons Per Hour; Gallons Per Hour; Liters Per Hour; Btu Per Hour; Pounds Per Hour; Short Tons Per Day; Kilograms Per Hour; Metric Tons Per Day; Gallons Per Day; Liters Per Day; Metric Tons Per Hour; or Million Btu Per Hour
	<u>Treatment:</u>			<u>Miscellaneous (Subpart X):</u>	
T01	Tank Treatment	Gallons Per Day; Liters Per Day	X01	Open Burning/Open Detonation	Any Unit of Measure in Code Table Below
T02	Surface Impoundment Treatment	Gallons Per Day; Liters Per Day	X02	Mechanical Processing	Short Tons Per Hour; Metric Tons Per Hour; Short Tons Per Day; Metric Tons Per Day; Pounds Per Hour; Kilograms Per Hour; Gallons Per Hour; Liters Per Hour; or Gallons Per Day
T03	Incinerator	Short Tons Per Hour; Metric Tons Per Hour; Gallons Per Hour; Liters Per Hour; Btu Per Hour; Pounds Per Hour; Short Tons Per Day; Kilograms Per Hour; Gallons Per Day; Liters Per Day; Metric Tons Per Hour; or Million Btu Per Hour	X03	Thermal Unit	Gallons Per Day; Liters Per Day; Pounds Per Hour; Short Tons Per Hour; Kilograms Per Hour; Metric Tons Per Day; Metric Tons Per Hour; Short Tons Per Day; Btu Per Hour; or Million Btu Per Hour
T04	Other Treatment	Gallons Per Day; Liters Per Day; Pounds Per Hour; Short Tons Per Hour; Kilograms Per Hour; Metric Tons Per Day; Metric Tons Per Hour; Short Tons Per Day; Btu Per Hour; Gallons Per Day; Liters Per Hour; or Million Btu Per Hour	X04	Geologic Repository	Cubic Yards; Cubic Meters; Acre-feet; Hectare-meter; Gallons; or Liters
T80	Boiler	Gallons; Liters; Gallons Per Hour; Liters Per Hour; Btu Per Hour; or Million Btu Per Hour	X99	Other Subpart X	Any Unit of Measure Listed Below

UNIT OF MEASURE	UNIT OF MEASURE CODE	UNIT OF MEASURE	UNIT OF MEASURE CODE	UNIT OF MEASURE	UNIT OF MEASURE CODE
Gallons.....	G	Short Tons Per Hour.....	D	Cubic Yards.....	Y
Gallons Per Hour.....	E	Metric Tons Per Hour.....	W	Cubic Meters.....	C
Gallons Per Day.....	U	Short Tons Per Day.....	N	Acres.....	B
Liters.....	L	Metric Tons Per Day.....	S	Acre-feet.....	A
Liters Per Hour.....	H	Pounds Per Hour.....	J	Hectares.....	Q
Liters Per Day.....	V	Kilograms Per Hour.....	R	Hectare-meter.....	F
		Million Btu Per Hour.....	X	Btu Per Hour.....	I

## 8. Process Codes and Design Capacities (Continued)

EXAMPLE FOR COMPLETING Item 8 (shown in line number X-1 below): A facility has a storage tank, which can hold 533.788 gallons.

[illegible]

NOTE: If you need to list more than 15 process codes, attach an additional sheet(s) with the information in the same format as above. Number the lines sequentially, taking into account any lines that will be used for "other" processes (i.e., D99, S99, T04 and X99) in Item 9.

9. Other Processes (See instructions on page 25 and follow instructions from Item 8 for D99, S99, T04 and X99 process codes)

[illegible]

## 10. Description of Hazardous Wastes (See instructions on page 25) - Enter information in the Sections on Form Page 5.

- A. EPA HAZARDOUS WASTE NUMBER** - Enter the four-digit number from 40 CFR, Part 261 Subpart D of each listed hazardous waste you will handle. For hazardous wastes which are not listed in 40 CFR, Part 261 Subpart D, enter the four-digit number(s) from 40 CFR Part 261, Subpart C that describes the characteristics and/or the toxic contaminants of those hazardous wastes.
- B. ESTIMATED ANNUAL QUANTITY** - For each listed waste entered in Section A, estimate the quantity of that waste that will be handled on an annual basis. For each characteristic or toxic contaminant entered in Section A, estimate the total annual quantity of all the non-listed waste(s) that will be handled which possess that characteristic or contaminant.
- C. UNIT OF MEASURE** - For each quantity entered in Section B, enter the unit of measure code. Units of measure which must be used and the appropriate codes are:

ENGLISH UNIT OF MEASURE	CODE	METRIC UNIT OF MEASURE	CODE
POUNDS	P	KILOGRAMS	K
TONS	T	METRIC TONS	M

If facility records use any other unit of measure for quantity, the units of measure must be converted into one of the required units of measure, taking into account the appropriate density or specific gravity of the waste.

**D. PROCESSES****1. PROCESS CODES:**

**For listed hazardous waste:** For each listed hazardous waste entered in Section A, select the code(s) from the list of process codes contained in Items 8A and 9A on page 3 to indicate all the processes that will be used to store, treat, and/or dispose of all the listed hazardous wastes.

**For non-listed hazardous waste:** For each characteristic or toxic contaminant entered in Section A, select the code(s) from the list of process codes contained in Items 8A and 9A on page 3 to indicate all the processes that will be used to store, treat, and/or dispose of all the non-listed hazardous wastes that possess that characteristic or toxic contaminant.

**NOTE: THREE SPACES ARE PROVIDED FOR ENTERING PROCESS CODES. IF MORE ARE NEEDED:**

1. Enter the first two as described above.
2. Enter "000" in the extreme right box of Item 10.D(1).
3. Use additional sheet, enter line number from previous sheet, and enter additional code(s) in Item 10.E.

**2. PROCESS DESCRIPTION:** If a code is not listed for a process that will be used, describe the process in Item 10.D(2) or in Item 10.E(2).

**NOTE: HAZARDOUS WASTES DESCRIBED BY MORE THAN ONE EPA HAZARDOUS WASTE NUMBER** - Hazardous wastes that can be described by more than one EPA Hazardous Waste Number shall be described on the form as follows:

1. Select one of the EPA Hazardous Waste Numbers and enter it in Section A. On the same line complete Sections B, C and D by estimating the total annual quantity of the waste and describing all the processes to be used to treat, store, and/or dispose of the waste.
2. In Section A of the next line enter the other EPA Hazardous Waste Number that can be used to describe the waste. In Section D(2) on that line enter "included with above" and make no other entries on that line.
3. Repeat step 2 for each EPA Hazardous Waste Number that can be used to describe the hazardous waste.

**EXAMPLE FOR COMPLETING Item 10** (shown in line numbers X-1, X-2, X-3, and X-4 below) - A facility will treat and dispose of an estimated 900 pounds per year of chrome shavings from leather tanning and finishing operations. In addition, the facility will treat and dispose of three non-listed wastes. Two wastes are corrosive only and there will be an estimated 200 pounds per year of each waste. The other waste is corrosive and ignitable and there will be an estimated 100 pounds per year of that waste. Treatment will be in an incinerator and disposal will be in a landfill.

Line Number	A. EPA Hazardous Waste No. (Enter code)				B. Estimated Annual Quantity of Waste	C. Unit of Measure (Enter code)	D. PROCESSES									
							(1) PROCESS CODES (Enter code)									
X 1	K	0	5	4	900	P	T	0	3	D	8	0				
X 2	D	0	0	2	400	P	T	0	3	D	8	0				
X 3	D	0	0	1	100	P	T	0	3	D	8	0				
X 4	D	0	0	2												Included With Above

## 10. Description of Hazardous Wastes (Continued. Use the Additional Sheet(s) as necessary; number pages as 5 a, etc.)

Line Number	A. EPA Hazardous Waste No. (Enter code)	B. Estimated Annual Quantity of Waste	C. Unit of Measure (Enter code)	D. PROCESSES											
				(1) PROCESS CODES (Enter code)										(2) PROCESS DESCRIPTION (If a code is not entered in D(1))	
1	K 0 6 9	1,000	T	S	0	1									Drum storage area
2	D 0 0 8	24,000	T	S	0	1									prior to recycling
3	D 0 0 8	1,000	T	S	0	1									includes spent
4	D 0 0 4	included in Line 3		S	0	1									refractor bricks
5	D 0 0 6	included in Line 3		S	0	1									
6	D 0 0 7	included in Line 3		S	0	1									
7	D 0 1 0	included in Line 3		S	0	1									
8	D 0 1 1	included in Line 3		S	0	1									
9															
10	D 0 0 8	250,000	T	S	0	1									Batteries in storage
11	D 0 0 6	250	T	S	0	1									prior to recycling
12	D 0 0 2	included in Line 10		S	0	1									
13															
14	D 0 0 8	125,000	T	S	0	6									Containment building
15	D 0 0 7	included in Line 14		S	0	6									storage prior to
16	D 0 0 6	included in Line 14		S	0	6									recycling
17	D 0 0 4	included in Line 14		S	0	6									
18	K 0 6 9	included in Line 14		S	0	6									
19															
20	D 0 0 8	20,000	T	T	0	4									Treatment unit
21															for stabilization of
22															slag
23															
24															
25															
26															
27															
28															
29															
30															
31															
32															
33															
34															
35															
36															
37															
38															
39															



## 11. Map (See instructions on pages 25 and 26)

Attach to this application a topographic map, or other equivalent map, of the area extending to at least one mile beyond property boundaries. The map must show the outline of the facility, the location of each of its existing and proposed intake and discharge structures, each of its hazardous waste treatment, storage, or disposal facilities, and each well where it injects fluids underground. Include all springs, rivers and other surface water bodies in this map area. See instructions for precise requirements. See Figures 2, 3, 4 and/or 7

## 12. Facility Drawing (See instructions on page 26)

All existing facilities must include a scale drawing of the facility (see instructions for more detail). See Figures 5A and 5B

## 13. Photographs (See instructions on page 26)

All existing facilities must include photographs (aerial or ground-level) that clearly delineate all existing structures; existing storage, treatment and disposal areas; and sites of future storage, treatment or disposal areas (see instructions for more detail). See Appendix 2

## 14. Comments (See instructions on page 26)

Additional information required by LAC 33:V.515

6. Facility Location: Latitude 30°35'008" Longitude: 91°14'040"

See Appendix 18 for legal description.

13. The facility is not constructed on Indian Lands.

14. The construction documents associated with containment building modifications were approved by LDEQ. However, approval of the application has not yet been received.

22. Exide Technologies is conducting closure activities at a facility in Heflin, Louisiana. Exide also conducts hazardous waste activities in Pennsylvania, Indiana, Tennessee, Missouri, Texas, California and Georgia.

23. The zoning at the facility is M-2, Heavy Industrial.

History: Part I and Part A

Revised 08/31/06

<u>Date of Revision</u>	<u>Revision</u>	<u>Explanation</u>	<u>Revised Pages Page Number</u>
3/27/86	LDEQ interpretation that batteries are containers add container/truck trailer storage area.	Chapter 41 (12/85) Schuylkill notified 3/85 inapplicability of this section to storage of batteries.	A2, B1, B2, B4, B6, C1, C3
4/29/88	Add container storage area for batteries on pallets.	Chapter 41, 12/85 See letter dated 05/04/88.	C1, C3, B6, B2, B4, B1, A2
2/15/89	Notification of Generation of Refractory Brick.	See letter dated 2/15/89.	A2, B1, B2, B4, B6
2/12/90	Petroleum Naptha Waste Generation Notice.	See letter dated 2/12/90.	A2, B1, B2, B4, B6
11/02/90	Submitted Part II Application for Battery Plates/Oxide in Piles.	Exempted by LDEQ from 12/85 rules. LDEQ issued Notice of Intent to Deny Exemption/Variance 09/23/91 and denied Variance 01/24/92. Schuylkill has appealed. EPA has proposed rules to allow storage of these materials in containment buildings. No determination has been made as to requirement for permitting of these buildings. See attached 11/02/90 letter.	
8/14/91	Notified acceptance of a portion of lead bearing D008 Group II recyclable by producer will be classified D004, D006, D007, D010, and D011 in addition to D008.	See letter dated 8/14/91.	A2, B1, B2, B4, B6

<u>Date of Revision</u>	<u>Revision</u>	<u>Explanation</u>	<u>Revised Pages Page Number</u>
8/28/91	Add stabilization fixaton process for blast furnance slag rather than "permit by rule" as a totally enclosed treatment facility.	Chapter 22 Land Ban Restriction D008 inorganic solid debris. Fed. Regs. Prom. 5/90. On 12/11/90 notified LDEQ this process was a totally enclosed treatment facility. LDEQ forwarded letter to EPA. Process in existence prior to May 1990. See attached letters 12/04/90 and 8/28/91.	A2, B1, B2, B3, B6, C1, C3
3/24/92	Nickel Cadmium Batteries Generation and Accumulation Notice	See attached letter dated 3/24/92.	Notes Section B Item 4
4/02/92	Complete revision to comply with LDEQ Technical Review of Part II H.W. Permit Application.		All Pages
1/30/97	Change from Part I to EPA - Hazardous Waste permit Application - Part A.	See Attachment Number 1 - Change of Ownership Letter dated October 29, 1996.	All Pages
5/23/97	Revised Part A	To correct Process Design Capacities. See DEQ letter of 04/08/97.	All Pages
2/03/99	Revised Part A	To correct Process Design Capacities.	3
7/31/01	Revised Part A	Name Change	A1, A2
10/17/01	Class 3 Permit Modification	Containment Building	All Pages
5/05/03	Submitted Revised Part A and B	Permit Renewal Application. Permit to expire 11/01/03.	All Pages

History: Part I and Part A Cont'd.  
Page 3

<u>Date of Revision</u>	<u>Revision</u>	<u>Explanation</u>	<u>Revised Pages Page Number</u>
7/23/03	Class 3 Permit Modification	Response to Comments on 10/17/01 Submission	All Pages
10/28/03	Class 3 Permit Modification	Response to Comments on 7/23/03 Submission	All Pages
10/20/05	Submitted Revised Part A and Part B	Response to NOD. Remove K069/D008 Storage Area.	All Pages
9/06	Submitted Revised Part A and Part B	Response to NOD. Add K069/D008 Storage Area	All Pages

**RESPONSE  
ATTACHMENT 5**

## **CHAPTER 5**

# **PERMIT APPLICATION CONTENTS**

**Title 33**  
**ENVIRONMENTAL QUALITY**  
**Part V. Hazardous Waste and Hazardous Materials**  
**Subpart 1. Department of Environmental Quality Hazardous Waste**

**Chapter 5. Permit Application Contents**  
**Subchapter A. General Requirements for Permit Applications**

**§501. Permit Application**

- A. Any person who is required to have a permit (including new applicants and permittees with expiring permits) shall complete, sign, and submit a permit application to the administrative authority as described in this Section and LAC 33:V.4301, 4303, and 4305. Persons currently authorized with interim status shall apply for permits when required by the administrative authority. Persons covered by RCRA permits by rule (LAC 33:V.305.D) need not apply. Procedures for applications, issuance, and administration of emergency permits are found exclusively in LAC 33:V.701 and 703. Procedures for application, issuance, and administration of research, development, and demonstration permits are found exclusively in LAC 33:V.329.

**Response**

Exide currently is operating under the provisions of Hazardous Waste Operating Permit LAD008184137. This permit was issued by the Louisiana Department of Environmental Quality (LDEQ) on November 1, 1993, and expired on November 1, 2003. Exide is herein submitting this Permit Application to renew the Hazardous Waste Operating Permit. Exide also operates a Containment Building under interim status. Exide submitted a Class 3 permit modification to LDEQ on October 17, 2001. The modification included upgrades to the containment building and a request to operate the building under the hazardous waste permit as required by LDEQ in Appendix 1. Floor upgrades at Area 2 of the Containment Building were completed in November 2003. The modification has not yet been approved. Exide is currently responding to comments provided by the LDEQ on the October 17, 2001 submission. This renewal application has assumed that the containment building will be permitted as part of this submittal and approval by LDEQ.

- B. When a facility or activity is not owned and operated by one person, it is the operator's duty to obtain a permit. The owner must also sign the permit application.

**Response**

Exide is a corporation and owner operator of the Baton Rouge Recycling facility. The designated Plant Manager of the Baton Rouge facility is a duly authorized officer of Exide and as such will sign all document associated with this application.

**C. Existing Hazardous Waste Management Facilities and Interim Status Qualifications**

1. Owners and operators of existing hazardous waste management facilities or of hazardous waste management facilities in existence on the effective date of statutory or regulatory amendments under the Act that render the facility subject to the requirement to have a RCRA permit must submit Part I of their permit application no later than:
  - a. six months after the date of publication of regulations which first require them to comply with LAC 33:V.Chapters 11, 15, 25, 30, 41 or 43; or
  - b. thirty days after the date they first become subject to the standards set forth in LAC 33:V.Chapters 11, 15, 25, 30, 41, or 43, whichever first occurs.

**Response**

Exide is submitting an updated Part I application as part of this permit renewal application.

2. The owner and operator of an existing hazardous waste management facility may be required to submit Part II of their permit application. The administrative authority may require submission of Part II. Any owner or operator shall be allowed at least 120 days from the date of request to submit Part II of the application. Any owner or operator of an existing hazardous waste management facility may voluntarily submit Part II of the application at any time. Notwithstanding the above, any owner or operator of an existing hazardous waste management facility must submit a Part II permit application in accordance with the dates specified in LAC 33:V.4305. Any owner or operator of a land disposal facility in existence on the effective date of statutory or regulatory amendments under the Act that render the facility subject to the requirement to have a RCRA permit must submit a Part II application in accordance with the dates specified in LAC 33:V.4305.

**Response**

Exide has submitted this permit renewal Part II application at least 120 days prior to the expiration of the current permit.



## **§505. Recordkeeping**

**Applicants shall keep records of all data used to complete permit applications and of any supplemental information submitted under this Chapter, as required in LAC 33:V.309.J.**

### **Response**

Exide acknowledges, understands and will comply with the above requirement and will comply by maintaining records and monitoring data required by this application for the active life (including operating, closure and post-closure periods) of the facility.

## **Subchapter B. Signatories to Permit Applications and Reports, Changes of Authorizations, and Certifications**

## **§507. Applications**

**All permit applications shall be signed as follows:**

- A. for a corporation: by a responsible corporate officer; for the purpose of this Section, a responsible corporate officer means:**
  - 1. a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision making functions for the corporation, or**
  - 2. the manager of one or more manufacturing, production or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding \$25 million (in second-quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.**
- B. for a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or**
- C. for a municipality, state, federal, or other public agency: by either a principal executive officer or ranking elected official.**

### **Response**

Exide is a corporation and owner operator of the Baton Rouge Recycling facility. The permit application has been signed by the designated plant manager of the Baton Rouge facility.

## **§509. Reports**

All reports required by permits, and other information requested by the administrative authority shall be signed by a person described in LAC 33:V.507, or by a duly authorized representative of that person. A person is a duly authorized representative only if: the authorization is made in writing by a person described in LAC 33:V.507; and the authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, superintendent, or position of equivalent responsibility. (A duly authorized representative may thus be either a named individual or any individual occupying a named position). The written authorization is submitted to the administrative authority.

### **Response**

All reports required by permits and other information requested by the Administrative Authority shall be signed by a duly authorized representative of the company as described in LAC 33:V.509.

## **§511. Changes in Authorization**

If an authorization under LAC 33:V.509 is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of LAC 33:V.509 must be submitted to the administrative authority prior to or together with any reports, information, or applications to be signed by an authorized representative.

### **Response**

Exide acknowledges and understands the above and will comply if an authorization becomes inaccurate.

## **§513. Certification**

### **A.**

1. Any person signing a document under LAC 33:V.507 or 509 shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision according to a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting

false information, including the possibility of fine and imprisonment for knowing violations."

**Response**

Exide is a corporation that owns and operates the Baton Rouge Smelter. The Baton Rouge Plant Manager has signed this document certifying the above statement. This signed certification statement is included as Appendix 2.

2. For remedial action plans (RAPs) under LAC 33:V.Chapter 5.Subchapter G, if the operator certifies according to Subsection A.1 of this Section, then the owner may choose to make the following certification instead of the certification in Subsection A.1 of this Section:

"Based on my knowledge of the conditions of the property described in the RAP and my inquiry of the person or persons who manage the system referenced in the operator's certification, or those persons directly responsible for gathering the information, the information submitted is, upon information and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

**Response**

Should Exide submit a remedial action plan, the above statement will be duly noted and signed by an authorized representative.

**B. Certification of an owner who is not the operator:**

"I certify that I understand that this application is submitted for the purpose of obtaining a permit to operate a hazardous waste management facility on the property as described. As owner of the property/facility, I understand fully that the facility operator and I are jointly and severally responsible for compliance with both LAC 33:V.Subpart 1 and any permit issued pursuant to those regulations." For owners of land disposal facilities, add: "I further understand that I am responsible for providing the notice in the deed to the property required by LAC 33:V.3525."

**Response**

The owner of this facility is also the operator; therefore this certification statement does not apply. The certification statement required by LAC 33:V.513.A.1 is included as Appendix 2.

## **Subchapter C. Permit Applications: Parts I and II**

### **§515. Part I Information Requirements**

All applicants for TSD permits shall provide the following information to the administrative authority using the application form provided. Other formatting requirements may be specified by the administrative authority.

- 1. date of application;**

**Response**

The application date is provided on the document cover.

- 2. EPA identification number;**

**Response**

The EPA identification number is provided on the Part 1 form.

- 3. a brief description of the nature of the business;**

**Response**

Exide is a secondary lead smelter and refiner which recycles spent lead acid batteries and other lead bearing materials into metallic lead ingots for use in batteries, ammunitions, weights, chemicals and other commercial products. This information is provided on the Part 1 form.

- 4. the activities conducted by the applicant which require it to obtain a TSD permit;**

**Response**

Exide operates hazardous waste storage and treatment units.

- 5. name, mailing address, and location of the facility for which the application is submitted;**

**Response**

Exide's name, mailing address and location of the facility are provided on the Part 1 form.

- 6. the latitude and longitude of the facility and a legal description of the site;**

**Response**

The latitude and longitude of the facility are provided on the Part 1 form. A legal description of the site is provided in Appendix 18.

- 7. up to four SIC codes which best reflect the principal products or services provided by the facility;**

**Response**

The SIC code is provided on the Part 1 form.

8. **an indication of whether the facility is new or existing and whether it is a first or revised application;**

**Response**

The Baton Rouge smelter is an existing facility. This permit renewal has been indicated on the Part 1 form.

9. **the operator's name, address, telephone number, ownership status, and status as federal, state, private, public, or other entity;**

**Response**

This information is provided on the Part 1 form.

10. **owner's name, address, and phone number if different from operator's;**

**Response**

This information is provided on the Part 1 form.

11. **contact: name of individual to be contacted concerning hazardous waste management;**

**Response**

This information is provided on the Part 1 form.

12. **telephone number of contact;**

**Response**

This information is provided on the Part 1 form.

13. **whether the facility is located on Indian lands;**

**Response**

The facility is not located on Indian lands. This information is indicated on the Part 1 form.

14. **a listing of all permits or construction approvals received or applied for under any of the following programs:**

- a. **hazardous waste management program;**

**Response**

LAD008184137 RCRA Hazardous Waste Permit (effective 11/01/93)

LA D008184137 Post Closure Permit for Hazardous Waste Piles #1 and #2 (effective 6/19/95)

- b. **Underground Injection Control (UIC) program;**

**Response**

Not applicable.

- c. **National Pollution Discharge Elimination System (NPDES) program;**

**Response**

LA004464 NPDES Permit (effective 8/1/06).

- d. **Prevention of Significant Deterioration (PSD) program under the Federal Clean Air Act;**

**Response**

2203300004 Air Permit Operating, Minor

- e. **nonattainment program under the Clean Air Act;**

**Response**

Not applicable.

- f. **National Emission Standards for Hazardous Air Pollutants (NESHAP) preconstruction approval under the Clean Air Act;**

**Response**

Not applicable.

- g. **ocean dumping permits under the Marine Protection Research and Sanctuaries Act;**

**Response**

Not applicable.

- h. **dredge or fill permits under Section 404 of the federal Clean Water Act (CWA); or**

**Response**

Not applicable.

- i. **other relevant environmental permits;**

**Response**

GD0332054P0326 LDEQ Solid Waste Permit (effective 7/2/98)

GD0332054P0160 LDEQ Solid Waste Permit (closed 1999)

70874 EP313

08400000400V0 Title V Part 70 permit (effective 10/5/05)

This information is also provided on the Part 1 form. Exide also submitted a Class 3 permit modification on October 17, 2001. The modification included upgrades to the Containment Building and a request to include the Containment Building in the Hazardous Waste Permit as required by LDEQ in Appendix 1. Approval of the modification has not yet been received.

15. a topographic map (or other map if a topographic map is unavailable) extending two miles beyond the property boundaries of the facility indicating the following; each hazardous waste treatment, storage, and disposal facility; each well where fluids from the facility are injected underground; and those wells, springs, other surface water bodies, and drinking water wells listed in public records or otherwise known to the applicant;

**Response**

As indicated on Part 1 form, the requested information is provided on Figures 2, 3, 4 and/or 7.

16. for existing facilities, a scale drawing of the facility showing the location of all past, present, and future treatment, storage, and disposal areas;

**Response**

As indicated on the Part 1 form, the requested information is provided on Figures 5A and 5B.

17. for existing facilities, photographs of the facility clearly delineating all existing structures; existing treatment, storage, and disposal areas; and sites of future treatment, storage, and disposal areas;

**Response**

As indicated on the Part 1 form, photographs are provided in Appendix 17.

18. a description of the processes to be used for treating, storing, and disposing of hazardous waste, and the design capacity of these items;

**Response**

The design capacity of the storage and treatment units is provided on the Part 1 form.

19. a specification of the hazardous wastes listed or designated to be treated, stored, or disposed of at the facility; an estimate of the quantity of such wastes to be treated, stored, or disposed of annually; and a general description of the processes to be used for such wastes;

**Response**

The type and annual quantity of waste to be treated and stored is provided on the Part 1 form.

20. status: ownership status of existing site or land for proposed site (federal, state, private, public, other);

**Response**

This information is indicated on the Part 1 form.

21. operation status;

**Response**

This information is indicated on the Part 1 form. The Baton Rouge facility is an active facility.

22. list other company hazardous waste operations in Louisiana (permitted or non-permitted and current or abandoned);

**Response**

This information is provided on the Part 1 form.

23. list other states in which hazardous waste operations are or have been conducted, as required by LAC 33:I.1701;

**Response**

This information is provided on the Part 1 form.

24. zoning of site, if applicable;

**Response**

As indicated on the Part 1 form, the site is zoned M-2, Heavy Industrial.

25. for hazardous debris: a description of the debris category(ies) and contaminant category(ies) to be treated, stored, or disposed of at the facility;

**Response**

Exide does not manage hazardous debris; therefore this citation does not apply.



26. other information required in LAC 33:I.1701; and

**Response**

Exide acknowledges and understands this requirement and will comply.

27. comments.

**Response**

Exide acknowledges and understands this requirement and will comply.

## **Subchapter D. Part II General Permit Information Requirements**

### **§516. Information Requirements for Solid Waste Management Units**

- A. The following information is required for each solid waste management unit at a facility seeking a permit:

1. the location of the unit on the topographic map required under LAC 33:V.517.B;

**Response**

The location of the three container storage areas, the treatment unit and the Containment Building are shown on Figure 5A.

2. designation of type of unit;

**Response**

There are three container storage areas at the Baton Rouge smelter. The Truck/Trailer Storage Area is used to hold spent lead-acid and nickel-cadmium batteries in tractor trailers. The Whole Battery Storage Area is used to hold spent lead-acid batteries on pallets prior to recycling. The K069/D008 Storage Area is used to hold drums of lead-bearing waste material prior to recycling. The Containment Building houses the primary recycling operation. The Containment Building is configured with three areas all under one roof as shown on Figure 6. The Raw Material Storage Area (Area 1) is used to store dry materials prior to recycling. The Paste Storage Area (Area 2) is used for the initial staging of neutralized lead paste from the battery breaking/desulfurization process prior to moving the paste to Area 1. Lead oxide paste is a red-brown, high density solid material with a moisture content less than 5%. The Production Area (Area 3) houses the blast furnace, reverberatory furnace and the refining kettles. This area is not regulated since it is a recycling/production facility. The Slag Stabilization Unit is a hazardous waste treatment unit that treats blast furnace slag by mixing it with Portland cement and sodium silicate.

3. **general dimensions and structural description (supply any available drawings);**

**Response**

Figure 5A (Topographic Map) shows the locations of each unit. Figures 6 (Containment Building Map), 11 (K069/D008 Storage Area), 12 (Truck/Trailer Storage Area), and 13 (Whole Battery Storage Area) present the available detailed design information about each unit. Appendix 25 provides the proposed upgrades to the Containment Building Floor Design. These upgrades were completed in November 2003 and certification documents are provided in Appendix 11C. Appendix 11 provides additional design information for the Containment Building. Photographs of the units are included in Appendix 17.

4. **when the unit was operated; and**

**Response**

Exide has operated the Containment Building since 1991. The Slag Stabilization Unit was completed and commenced operations in 1993. The K069/D008 Area became operational when the facility started, in 1969. The Truck/Trailer Area was built in 1986. The Whole Battery Storage Area was completed in 1999.

5. **specification of all waste codes for all hazardous wastes that have been managed at the unit.**

**Response**

Exide stores lead-bearing materials with waste codes D008, D007, D006, D004, D010, D011, and K069 in the K069/D008 Storage Area. The Truck/Trailer Storage Area holds spent lead-acid batteries with waste codes of D002, D006 and D008. The Whole Battery Storage Area hold spent lead-acid batteries with waste codes of D002 and D008. The Slag Stabilization Unit contains materials that have a waste code of D008. The Containment Building has materials with waste codes of D008, D007, D006, D004, D010, D011 and K069.

6. **details of all ancillary equipment including tanks storing hazardous waste in less than 90-day service and pipes carrying hazardous waste to the injection well(s) must meet the requirements of LAC 33:V.Chapter 19. A certification by an independent Louisiana Registered Professional Engineer must be provided attesting to the adequacy of pipes, valves, and pumps to handle hazardous waste under pressure and to the adequacy of secondary containment provided to meet the requirements of LAC 33:V.Subpart 1.**

**Response**

Exide does not use tanks to store hazardous waste, or have pipelines carrying hazardous waste. Therefore this section is not applicable.

- B. The owner or operator of any facility containing one or more solid waste management units must submit all available information pertaining to any known release of hazardous wastes or hazardous constituents from such unit or units.**

**Response**

Exide was issued a Post-Closure Permit for two closed hazardous waste piles in April 2001. The permit describes four solid waste management units (SWMUs) that were originally identified during a RCRA Facility Assessment conducted in 1987. These SWMUs are identified in Appendix 3 and discussed and shown on Figure 5 and include SWMU #34 (Slag Storage Area), SWMU #40 (Truck Washdown Area), SWMU #49 (Wastewater Drainage System), and SWMU #60 (Railcar Area). As required by the Post-Closure Permit, Exide submitted a Preliminary Report on November 13, 2001 to describe current facility conditions. A Phase I RCRA Facility Investigation Work Plan was also submitted on November 16, 2001. The Phase I RCRA Facility Investigation Work Plan was developed using existing information to propose collection of additional information necessary to determine the presence, magnitude, extent and mobility of hazardous waste constituents on and beneath the site that may have originated from the pre-RCRA and RCRA-permitted SWMUs.

However, the permitted container storage areas, the permitted treatment unit and Containment Building are not included in the proposed investigations as SWMUs and, accordingly, this section does not apply to this current application.

- C. The owner/operator must conduct and provide the results of sampling and analysis of groundwater, land surface and/or subsurface strata, surface water, and/or air, which may include the installation of wells, if the administrative authority ascertains it is necessary to complete a RCRA Facility Assessment that will determine whether a more complete investigation is necessary. If the owner/operator has an EPA approved RCRA Facility Investigation, the results of this investigation may be provided to the administrative authority.**

**Response**

Exide, as a result of the 1997 RCRA Facility Assessment (RFA) and the Post-Closure Permit, has submitted a RCRA Facility Investigation (RFI) Work Plan for investigation of four identified solid waste management units (SWMUs). These SWMUs are identified and discussed and shown in Appendix 3 and include SWMU #34 (Slag Storage Area), SWMU #40

(Truck Washdown Area), SWMU #49 (Wastewater Drainage System), and SWMU #60 (Railcar Area). Results from these investigations will be provided to LDEQ as required. However, the permitted container storage areas, the permitted treatment unit and the interim-status Containment Building are not identified as SWMUs and, accordingly, this section does not apply to this current application.

#### **§517. Part II Information Requirements (the Formal Permit Application)**

The formal permit application information requirements presented in this Section reflect the standards promulgated in LAC 33:V.Subpart 1. These information requirements are necessary in order to determine compliance with all standards. Responses and exhibits shall be numbered sequentially according to the technical standards. The permit application must describe how the facility will comply with each of the sections of LAC 33:V.Chapters 15–37 and 41. Information required in the formal permit application shall be submitted to the administrative authority and signed in accordance with requirements in LAC 33:V.509. The description must include appropriate design information (calculations, drawings, specifications, data, etc.) and administrative details (plans, flow charts, decision trees, manpower projections, operating instructions, etc.) to permit the administrative authority to determine the adequacy of the hazardous waste permit application. Certain technical data, such as design drawings, specifications, and engineering studies, shall be certified by a Louisiana registered professional engineer. If a section does not apply, the permit application must state it does not apply and why it does not apply. This information is to be submitted using the same numbering system and in the same order used in these regulations:

- A. a general description of the facility including hours of operation/day and day/week;

##### **Response**

The Exide Baton Rouge smelter is a secondary lead smelter and refinery that recycles lead-bearing materials including spent lead-acid batteries to make metallic lead used in production of new batteries. The facility is located in East Baton Rouge Parish, at latitude 30 degrees, 35 minutes, 8 seconds, longitude 91 degrees, 14 minutes, 40 seconds. Figure 2 shows the Site Location Map and Figure 5 shows the Topographic Map. The plant is in operation 24 hours per day, seven days per week. Normal office hours are Monday through Friday 8:00 a.m. through 4:30 p.m. The facility has 24-hour security.

Exide processes lead bearing raw materials, including spent lead acid batteries, emissions control dust, sludges and by products into metallic lead for resale and reuse. Some of the raw materials used in the process and stored on site are classified as hazardous wastes by regulation. Exide was issued a Hazardous Waste Permit (LAD008184137) to operate three

container storage areas (the Truck/trailer Storage area, the K069/D008 Storage area and the Whole Battery Storage area). Exide operates a Containment Building, which is currently under interim status. A hazardous waste treatment unit, the Slag Stabilization unit, is also permitted under LAD008184137.

The lead-bearing raw materials are delivered to the facility in trucks or trailers and are unloaded at the loading dock. If the material is classified a hazardous, it will be received under manifest, as specified in the Louisiana Department of Environmental Quality, Hazardous Waste Division Environmental Regulatory Code. Other nonhazardous and exempt materials are received under bill of lading. Some of these lead-bearing materials are received in drums. These drums will either be emptied directly into a feedstock pile in the Containment Building or held temporarily in the K069/D008 storage area.

Lead acid batteries are either fed directly into the battery breaker or are stored temporarily onsite in one of two permitted storage area, the Truck/Trailer storage area or the Whole Battery storage area. Lead acid batteries are processed in the battery breaker unit, by cutting the batteries, and hydraulically separating the individual components. The plastic is thoroughly washed to remove residual acid and lead. It is then loaded into trailers and shipped offsite for recycling. The battery acid, a weak sulfuric acid solution, is neutralized with sodium hydroxide and crystallized to form sodium sulfate salt. The sodium sulfate solution generated during the recycling process is collected in a storage tank. The solution is pre-heated and introduced into an evaporator/crystallizer. The unit operates on the principle of a draft-tube-baffle crystallizer where brine is continuously circulated. The stream of crystal-laden brine is extracted and centrifuged. The mother liquor is returned to the process while the crystals are pneumatically conveyed and dried in a warm air stream and stored in a silo for loadout. The salt is sold as a product. The moisture laden vapors from the evaporator/crystallizer unit are ducted to a heat exchanger for condensing. Condensate is collected in a tank and used for cake washing in the main filter press. The condenser cooling water is re-circulated through a cooling tower and reused for the same purpose.

The lead material from the batteries is processed to convert lead sulfate to lead oxide. The de-sulfurized and neutralized lead oxide paste is then stored in the Paste Storage Area of the Containment Building, prior to recycling. Lead oxide paste is a red-brown, high density solid material with a moisture content less than 5%. The Paste Storage Area of the Containment Building (Area 2) has a floor system suitable for containing wastes which may contain free liquids. The floor system is, from top to bottom, acid brick, 6 inches 4000 psi reinforced concrete, 12 ounce geotextile, 80 mil HDPE geomembrane, and geonet drainage layer.

The facility operates one blast furnace and one reverberatory furnace that are used to smelt the lead-bearing raw materials. The molten lead is cast either into ingots using two casting machines or blocks using molds. The finished lead is tested to determine if it meets client specifications and is then loaded into trucks and transported off-site for reuse.

As a part of the lead recycling, a blast furnace slag is generated. This slag contains mostly iron, silica and calcium oxides, with typically less than 1% lead. However, the slag is classified as a hazardous waste due to the lead content, since it typically cannot pass the TCLP analysis for lead. The slag is allowed to cool, crushed to small diameter, and treated using a mixture of cement and sodium silicate, as specified in the facility's Hazardous Waste Permit. The stabilized slag is rock-like in appearance and engineering properties. After treatment, the slag is placed in a permitted onsite Solid Waste landfill.

Operations are summarized on the Process Flow Diagram, Figure 1.

Since the original permit application was submitted in 1993, the facility has had several changes to the operations including:

- Installation of the current Battery Breaker Unit in 1995, which replaced the former MA breaker system.
- Upgrades to the groundwater monitoring system. New wells were installed in 1995 and initially sampled in 1998.
- Development of Stormwater Pollution Prevention Plan in February 1995, Revised October 1997, May 2000, June 2001.
- Development of Spill Prevention Control and Countermeasure Plan on June 7, 1995, Revised May 4, 1998, May 31, 2000, July 6, 2000, June 6, 2001, December 12, 2002, March 28, 2003, May 5, 2003, October 2005 (figures only).
- Completed construction of the New Landfill, an onsite Type I solid waste landfill which began receiving stabilized blast furnace slag on July 3, 1998.
- Installation of the No. 7 Baghouse in November 1998.
- Completion of the Whole Battery Storage Area in 1999.
- Closure of the Old Landfill, an onsite Type I solid waste landfill closed in 1999.
- Discontinued use of the No. 2 Blast Furnace in December 1999.
- Taken refining kettles No. 1 and No. 11 out of service in January 2000.
- Taken the billet casting machine out of service in January 2000.
- Revision of Transporter Contingency Plan on June 30, 2000.
- Submission of Groundwater Sampling and Analysis Plan on July 20, 2001.

- Development of Waste Minimization Plan in May 2002.
- Submission of Type 3 Permit Modification on October 17, 2001 to include the interim status Containment Building in the hazardous waste permit and to conduct Containment Building upgrades. Responses to comments were issued on July 23, 2003 and October 28, 2003.
- Permit Renewal Application was submitted on May 5, 2003. The application included the following revised plans:
  - Waste Analysis Plan (May 2003);
  - Inspection Plan (May 2003);
  - RCRA Contingency Plan and Emergency Response Plan (4/18/03);
  - Facility Closure Plan (May 2003);
  - Operational Procedure for Dust Suppression (May 2003);
  - Training Manual (May 2003); and
  - Spill Prevention Control and Countermeasure Plan (May 5, 2003).
- LDEQ-approved Containment Building upgrades were completed in November 2003.
- Responses to comments on the Permit Renewal Application were submitted on October 20, 2005. The responses included the following revised plans:
  - RCRA Contingency Plan and Emergency Response Plan (10/20/05);
  - Facility Closure Plan (October 2005);
  - Training Manual (October 2005);
  - Spill Prevention Control and Countermeasure Plan (October 2005, Figures only); and
  - Waste Minimization Plan (October 2005).
- The Spill Pollution Control and Countermeasures Plan and the Stormwater Pollution Prevention Plan were removed. The contents of these plans were incorporated into the Contingency and Emergency Response Plan.

**B. a topographic map or maps showing a distance of 1,000 feet around the facility at a scale of 2.5 centimeters (1 inch) equal to not more than 61.0 meters (200 feet); contours must be shown on the map. The contour interval must be sufficient to clearly show the pattern of surface water flow in the vicinity of and from each operational unit of the facility. The map or maps shall clearly show the following:**

- 1. map and scale date;**

**Response**

A topographic map of the facility is included as Figure 5, Topographic Map. The scale of the map is 1 inch equals 50 feet. The map shows the facility and the adjacent areas. Figure 7, Surrounding Topography Map, provides contours for the facility and an area 1,000 feet outside the facility, including water bodies. The scale of the map is 1 inch equals 200 feet.

2. **orientation of the map (north arrow);**

**Response**

A north arrow is included on Figures 5 and 7.

3. **100-year floodplain area;**

**Response**

Exide has included maps showing the 100-year flood plain area in Figure 9. The Baton Rouge Smelter is located outside the limits of the 100-year flood plain.

4. **Surface waters including intermittent streams and surface flow through the site and a map of the potentiometric surface for aquifers within 100 feet of lowest elevation of disposal cells, or other facilities containing hazardous waste, from 1,000 feet upstream to 1,000 feet downstream, where practicable. Included should be a general area map and cross sections indicating the extent of freshwater sands, and the degree of isolation from waste sources by confining layers of clay;**

**Response**

Figure 14 has been prepared to show the surface conditions within 1,000 ft of the facility boundary. Figure 2 has been prepared using an aerial photograph overlain with topographic contours for areas within 1,000 feet of the facility boundary. As shown, Baton Rouge Bayou is the only perennial surface water body in the area. Intermittent flow is experienced in the swales located along the south and east property boundaries, and from areas across the Baton Rouge Bayou from the Main Facility. The closed hazardous waste disposal facilities have estimated bottom of waste elevations no lower than +50 ft MSL. The first major aquifer beneath the Site is a sand aquifer consisting of the "400-ft sand" and "600-ft sand" aquifers. While these aquifers are identified as separate units south of the Site they are merged beneath the Site. The top of the merged 400-ft/600-ft aquifer is mapped to be at or about elevation - 70-ft MSL, or 120-ft below the lowest estimated bottom of hazardous waste. Based on published information, the potentiometric surface for the merged 400-ft/600-ft aquifer is at



approximate elevation +20 MSL and the general direction of flow is south-southwest (Whiteman, Jr., 1979).

Figure 14 provides the potentiometric map for the shallow aquifer beneath the Site. The groundwater elevation ranges from 63-ft MSL at the southeastern end of the Site to 37-ft MSL at the northwestern end of the Site. Groundwater within this unnamed uppermost water table aquifer flows towards and is hydraulically connected with the Baton Rouge Bayou. The groundwater is reported to fluctuate in response to changes in the bayous stage. Figure 15 provides cross-sections developed using a combination of site borings and published information. The cross-sections show the vertical relationship between the closed hazardous waste disposal areas and the 400-ft/600-ft sand aquifers.

5. **surrounding land uses (residential, commercial, agricultural, recreational, public) such as schools, hospitals, libraries, etc.;**

**Response**

The map in Figure 7 shows the surrounding land uses within 2 miles at a scale of 1"=1000'. Figure 2 shows the Site and surrounding topographic information within 1000 ft of the facility at a scale of 1"=200'. The Petro-Processors site, a Superfund site, is located within 100-feet of the Baton Rouge smelter. Great Lakes Carbon (formerly Reynolds Metals Corporation), also located within 100-feet of the Baton Rouge smelter, is an industrial facility that process petroleum coke.

There are no schools, hospitals, libraries or public building with 2 miles of the site. The nearest pasture land is located 1.5-mile from the facility. The nearest property zoned residential is situated 1.1 miles from the facility. The closest residential dwelling is located 1.4 miles from the facility boundary.

6. **legal boundaries of the TSD facility site;**

**Response**

Figures 5A and 5B, (50 Scale Topographic Maps), 7 (1000-Scale Aerial Map) present the legal boundaries for the facility.

7. **access control (fences, gates);**

**Response**

The facility is fenced on three sides with a main gate and two alternate gates. Prior to entering the facility's main gate, vehicles must check in with the security guard. Any delivery or shipment of waste will be weighed in at the scale prior to entering the site. One of the two alternate gates is used solely for rail car access. Any rail

10. the proposed "point of compliance" as defined under LAC 33:V.3311;

**Response**

As groundwater monitoring is not required for the hazardous waste storage and treatment units, a point of compliance for the hazardous waste storage and treatment units does not apply.

11. buildings, treatment, storage, or disposal operations; or other structures (recreation areas, runoff control systems, access and internal roads, storm sanitary, and process sewerage systems, loading and unloading areas, fire control facilities, utilities, security facilities, etc.);

**Response**

The general layout of the facility including buildings, treatment and storage operations, the wastewater drainage and collection system, roadways, unloading areas, fencing and the guard house is shown on Figures 5A and 5B. Figure 6 presents a detailed map showing the layout of the Containment Building.

12. barriers for drainage or flood control;

**Response**

Barriers within the facility are provided to divert rainwater away from process and storage units and into a permitted water treatment unit. The active portion of the facility is not located within a flood zone and no flood control measures are required. The Topographic Map, Figure 5, shows the site drainage.

13. location of operational units within the TSD facility site, where hazardous waste is (or will be) treated, stored, or disposed of (including equipment cleanup areas). (For large TSD facilities, the administrative authority may allow the use of other scales on a case-by-case basis); and

**Response**

Exide has three hazardous waste storage areas, a treatment unit and a containment building. The Truck/Trailer Storage Area is used to hold spent batteries in trailers. It has a permitted capacity of 85,000 batteries. The Whole Battery Storage Area is used to hold batteries on pallets. It has a permitted capacity of 121,500 batteries. The K069/D008 Storage Area is used to hold drums of listed or characteristic hazardous waste. It has a permitted capacity of 544 drums.

The Containment Building is used to hold lead-bearing raw materials prior to recycling. The building has an engineered capacity of 3,333 tons of blast furnace slag that is stored prior to on-site stabilization and disposal. Additionally, the building has the capability to hold 12,080 tons of lead material for recycling, including battery plates, lead oxide paste, reverberatory furnace slag, lead dross, and purchased scrap.

The general layout of the facility is shown on Figure 4, Operational Areas. Figure 6 presents a detailed map showing the layout of the Containment Building including operational units and the permitted storage and treatment areas.

**14. natural features affecting off-site drainage patterns, transportation, utilities, and location of effluent discharges.**

**Response**

All of the natural features that affect off-site drainage patterns, transportation, utilities and the location of effluent discharges are included on Figure 2 (200-Scale Topographic Map). Discharge locations are also shown on Figures 5A and 5B.

**C. site layout and facility design when phased construction is planned; the plans must indicate each phase and an accompanying schedule of construction;**

**Response**

No construction is planned as Containment Building floor upgrades were completed in November 2003. The certification document is provided in Appendix 11C.

**D. chemical and physical analyses of the hazardous wastes and the hazardous debris to be handled at the facility. At a minimum, these analyses shall contain all the information that must be known to treat, store, or dispose of the wastes properly;**

**Response**

The chemical and physical analyses of the hazardous wastes being handled at this facility are included in the Waste Analysis Plan included as Appendix 4. Prior to approval of hazardous materials for shipment to Exide, analyses for total antimony, arsenic, barium, cadmium, chromium, copper, lead, mercury, selenium, silver, tin, zinc, fluoride, chloride, sulfide, aluminum, and magnesium and TCLP arsenic, barium, cadmium, chromium, lead, mercury, selenium and silver are submitted by the generator for review by Exide. Prior to approval of coproduct materials for shipment to Exide, analyses for total antimony, arsenic, barium, cadmium, chromium, copper, lead, mercury, selenium, silver, tin, zinc, fluoride, chloride, sulfide, aluminum, and magnesium are submitted by the generator for review by Exide. Upon arrival at the facility, wastes are

visually inspected during unloading and are analyzed for total lead to confirm the profile and determine the proper recycling method.

Samples of untreated slag are analyzed for lead, calcium, iron, antimony and salt content to determine if the slag should be recycled or disposed. Treated slag is sampled once per quarter for TCLP toxicity analysis.

- E. a copy of the waste analysis plan required by LAC 33:V.1519.B;**

**Response**

The Waste Analysis Plan is included as Appendix 4.

- F. a description of the security procedures (including entry control, hours manned, lighting, monitoring, and other procedures to prevent unauthorized entry) and equipment required by LAC 33:V.1507 or a justification demonstrating the reasons for requesting a waiver of this requirement;**

**Response**

The Exide facility has been secured as required by LAC 33:V.1507. This includes fence on three sides of the facility with a natural barrier, Baton Rouge Bayou on the fourth side. The facility's main gate has a guard house with 24-hour security that control ingress/egress by the public. Guards periodically patrol the site. Two other facility gates (a railroad entrance and a side parking lot entrance) are kept locked and are used only temporarily. When opened the gates are attended by Exide personnel. All facility gates are lighted and monitoring is provided by remote video cameras. Light posts are present at the main gate entrance, off of Brooklawn Avenue, the center and west side of the parking lot. The administration building, the railroad spurs and the north-west portion of the facility. Light post locations are provided on Figure 5. Other entry controls include signs at the facility entrance and at each hazardous waste unit.

- G. a copy of the general inspection schedule required by LAC 33:V.1509.B. Include, where applicable, as part of the inspection schedule, specific requirements in LAC 33:V.1709, 1719, 1721, 1731, 1755-1759, 1763, 1907.I, 1911, 2109, 2309, 2507, 2703.A-G, 2907, 3119.B and C, and 3205;**

**Response**

The general inspection schedule for the Baton Rouge smelter is included in the inspection plan included as Appendix 5. Inspections are conducted daily, weekly, monthly, and quarterly. The inspections are documented on the inspection forms and are placed in the facility's files.

- H. a justification of any request for a waiver(s) of the preparedness and prevention requirements of LAC 33:V.1511;**

**Response**

Exide is not requesting a waiver of the preparedness and prevention requirements of LAC 33:V.1511.

- I. **a copy of the contingency plan required by LAC 33:V.1513 [Note: Include, where applicable, as part of the contingency plan, specific requirements in LAC 33:V.2909];**

**Response**

A copy of the most current Contingency Plan and Emergency Response Plan is included as Appendix 6. The Plan includes assignment of duties to personnel, emergency response procedures, types of emergency situations, procedures for plan or unit shutdowns, the alarm system and types and locations of emergency equipment. This plan includes the requirements of the Spill Pollution Prevention and Countermeasure Plan and the Stormwater Pollution Prevention Plan.

- J. **a description of procedures, structures, or equipment used at the facility to:**
1. **prevent hazards in unloading operations (for example, ramps, special forklifts);**

**Response**

The lead-bearing materials are received in containers (i.e., drums or batteries on pallets) and off loaded directly into the process units or stored in one of three container storage areas. Forklifts are used to handle the pallets of lead-bearing materials. The dock is equipped with guard rails to prevent a forklift from sliding off of the dock. The operator and other facility personnel are trained in the use of forklifts and associated safety procedures. Front-end loaders are used to transport the lead bearing raw material, prior to recycling.

2. **prevent runoff from hazardous waste handling areas to other areas of the facility or environment, or to prevent flooding (for example, berms, dikes, trenches);**

**Response**

The permitted container storage areas are bermed to prevent runoff and runoff slope to collection points for transfer to the wastewater drainage and collection system. Exide does not accept any waste that has free liquids, so that all of the materials handled by the Baton Rouge smelter are dry. Two of the container storage areas (the Whole Battery Storage Area and the K069/D008 Storage Area) are located under a roof to prevent rainwater from accumulating with the waste. The wastes are stored on pallets to elevate them above any spills. The third storage area (the

Truck/Trailer Storage Area) has spent batteries that are stored in closed trailers. The trailers prevent rainfall from mixing with the batteries and elevate the waste away from stormwater. Berms and grading are shown on Figures 11 (K069/D008 Storage Area), 12 (Truck/Trailer Storage Area) and 13 (Whole Battery Storage Area).

The Slag Stabilization unit is located under a roof, and is sloped to floor sumps that transmit wash-down water and any accumulated liquids to the plant's wastewater treatment unit. Figure 6 shows the grading of the Slag Stabilization unit.

The Containment Building is totally enclosed with walls and a roof. Any water generated from wash-down activities drains to floor sumps and is pumped to the wastewater treatment unit. Dust suppression is used on feed piles of material as needed in Area 1 of the Containment Building (see Figure 6, Containment Building Map). The suppression is designed to keep the feed piles moist to control dust but not wet so that free liquids will be generated. Application of water for dust control is also presented in Appendix 12, Dust Suppression Operational Procedure. Area 2 of the Containment Building (Figure 6) is used for the initial staging of desulfurized lead paste from the Battery Breaker unit prior to recycling. The paste stored in this area is visibly moist and may contain free liquids. Lead oxide paste is a red-brown, high density solid material with a moisture content less than 5%. The liquids generated in this area are drained to a sump and pumped to the Battery Breaker unit where the water is treated and reused in the process.

### **3. monitoring leachate control;**

#### **Response**

The K069/D008 container storage area does not have waste that contains free liquids; therefore, leachate control does not apply. The Slag Stabilization unit does not process waste that contains free liquids and leachate control does not apply.

The two container storage areas that contain spent lead-acid batteries have impervious floors (concrete overlain by asphalt) as shown in Figures 12 (Truck/Trailer Storage Area) and 13 (Whole Battery Storage Area) are inspected daily to ensure that none of the batteries are broken or leaking. Any liquid within the areas drains to a collection point for transfer to the wastewater treatment system.

The Containment Building (Figure 6) stores dry material in Area 1. Any ponded liquid generated during application of water for dust control is pumped to the wastewater treatment system. Area 2 of

the building is used for storage of desulfurized battery paste, which is moist and typically contains free liquids. Liquid within the lead oxide paste is introduced during the battery breaking process. Lead oxide paste is a red-brown, high density solid material. The floors in Area 2 are sloped towards a sump situated along the west wall of Area 2. The liquid is removed from the sump by pump and sent to the battery breaking operations. During construction, drainage was confirmed by pouring water on all concrete surfaces at a rate of 25 gallons per minute. No puddling was observed. As-built drawings of the Area 2 floor system, including sump, are provided in Appendix 11. Figure 6 has been revised to show the sump location.

#### **4. prevent contamination of water supplies;**

##### **Response**

Exide maintains all waste storage and treatment facilities to prevent the generation of runoff from these areas into the environment. Waste materials are stored only in permitted container storage areas and Containment Building. Any water generated from washdown of the operational parts of the facility is transmitted to the facilities Waste Water Treatment Unit via concrete drainage trenches and pipes, where it is treated prior to discharge. Water treatment includes an initial filtration, chemical treatment and flocculation and a final filtration to remove any excess particles.

The Containment Building has an efficient primary barrier designed and constructed to prevent the migration of any hazardous constituents through the barrier or into water supplies. Area 1 manages wastes without free liquids; but will utilize small amounts of water for the purpose of dust suppression. However, this activity should not generate any free standing liquids. Area 1 is not required to have a liquid collection system as liquids are not managed in the area. The floor system at Area 1 is constructed of, from top to bottom, 6 inches reinforced concrete, Amoco 4516 geotextile, 40 mil HDPE geomembrane, and 1 inch sand over existing concrete and is sloped to collection points to facilitate removal of wastes from the primary barrier and prevent migration of hazardous constituents into the barrier.

Area 2 is used to manage lead oxide paste which may have free liquids. The Area 2 floor system consists of, from top to bottom, acid brick, minimum 6 inches of 4,000 psi reinforced concrete, 12 ounce geotextile, 80 mil HDPE liner and geonet drainage layer. Drainage is directed to a sump to minimize the accumulation of free liquids on the primary barrier. Sloped floors facilitate the collection of liquids for removal. The liquids collected at the sump are pumped from the sump and transferred to the battery breaking

operation. As-built drawings of the Area 2 floor system, including sump, are provided in Appendix 11. Figure 6 has been revised to show the sump location.

**5. monitor water and air pollution affecting area outside site;**

**Response**

Exide discharges all water from the wastewater treatment plan under the provisions of Water Discharge permit LA0004464. Exide's efforts at the Baton Rouge smelter to reduce and control water pollution are detailed in the Contingency and Emergency Response Plan (Appendix 6). Outfall 001 discharge is sampled per the conditions of permit LA0004464. Stormwater runoff samples are also collected from Outfall 003. The locations of the two outfalls are shown on Figure 5. Air emissions are regulated by Exide's Air Permit 0840-00004-V0. Emission points are vented to control devices to filter particulate and lead emissions. The control devices, fabric filter baghouse, are tested to insure compliance. A schematic of the air handling system is provided as Figure 10.

**6. mitigate effects of equipment failure, power outages, inclement weather, or other abnormal conditions;**

**Response**

The facility is manned 24-hours per day 7 day per week. If there is a power outage or equipment failure, personnel will be available to respond and control the situation. The Battery Breaker Unit is equipped with a backup power generator so that if the power is lost the unit will have enough power to process the batteries that are already in the system. If the power is lost to the furnace area, the operations will be stopped immediately since the air system will be shut down. The furnace feed systems will be shutdown in the event of a power outage and the material in the furnaces currently will be either be allowed to flow out via gravity or left in the furnace to be pumped out once the power is restored.

**7. prevent undue exposure of personnel to hazardous waste (for example, protective clothing);**

**Response**

As a part of Exide's corporate employee exposure prevention program, all personnel that enter the facility must wear respiratory protection to reduce exposure to lead. The facility issues all employees personal work clothing, hard hats, safety glasses and steel-toed work boots. Work clothing and respirators are washed onsite at the end of each shift. Special protective equipment is provided to employees depending on the job or task, such as air supplied respirators, tyvek suits, heat resistant and chemical



resistant gloves and splash guard face shields. All protective equipment is removed during decontamination prior to exiting hazardous waste areas. All water generated for decontamination operations, laundry and respirator cleaning is pumped to the permitted water treatment unit where it is treated and discharge via Outfall 001.

8. **prevent accidental ignition or reaction of ignitable, reactive, or incompatible wastes as required to demonstrate compliance with LAC 33:V.1517; and**

**Response**

Exide only receives wastes that are non-reactive and compatible with the lead recycling process. The facility has a strict screening process that begins before the waste is received at the facility. Generators must complete a detailed waste profile that is reviewed by the Baton Rouge environmental group and production manager prior to acceptance. The waste profile is provided in the Waste Analysis Plan in Appendix 4. After the waste arrives, it is weighed in at the front gate scale and unloaded. During the unloading, waste is visually inspected to insure that it matches the profile. Waste may also be tested onsite for total lead to confirm the profile and determine the proper recycling method.

9. **prevent nonpermitted releases to the atmosphere.**

**Response**

The materials handled by the facility do not produce organic vapors. The main source of possible releases to the atmosphere is in the form of dust and smoke produced during the recycling process. All emission points are vented to control devices that control releases to the atmosphere. The Containment Building utilizes water spray to suppress dust in Area 1. Five baghouses with a design flow of 314,000 cfm manage air from the Containment Building. A road sweeper is used to clean the facility's pavement.

Exide operates the facility in accordance with all appropriate air permitting requirements.

- K. **traffic pattern, estimated volume (number, types of vehicles) and control (for example, show turns across traffic lanes, and stacking lanes, if appropriate; describe access road surfacing and load bearing capacity; show traffic control signals);**

**Response**

The Exide facility is located at the end of Brooklawn Drive, off LA Hwy 61. Brooklawn Drive is a Parish maintained road which provides access to several industrial facilities including Union Tank Cars, Great Lakes Carbon

and NPC. Both sides of Brooklawn drive are sparsely developed and essentially all traffic on Brooklawn Drive is related to these industries.

Exide will have on a typical day up to 30 trucks (tractor trailers) onsite to unload spent lead acid batteries and pickup recycled lead blocks or bars. Approximately 120 autos will use Brooklawn for access to the industrial facilities. On-site traffic patterns are provided in Figure 17.

Road surfaces in and around the facility are constructed of 6 to 8-inch concrete with a load bearing capacity of 3,000 pounds per square inch.

- L. an outline of both the introductory and continuing training programs by owners or operators to prepare persons to operate or maintain the TSD facility in a safe manner as required to demonstrate compliance with LAC 33:V.1515. A list of general qualifications of key operating positions and a brief description of how training will be designed to meet actual job tasks in accordance with these requirements;**

**Response**

Exide has a comprehensive training program at the Baton Rouge smelter. The Training Manual is included as Appendix 13. The program addresses OSHA regulations, LDEQ regulations and Corporate Health, Safety and Environmental policies. The manual lists the training topics and provides an outline of the training given for each topic. Training topics include medical surveillance, lockout/tagout, confined space entry, hearing conservation, respiratory protection, powered industrial truck safety, hazard communication, HAZWOPER, the facility contingency plan, environmental regulations, spill response, work practice training, and DOT hazardous material training. All new employees will undergo initial employee orientation training. Initial employee training includes:

- Medical Surveillance Program
- Lockout Tagout Program
- Confined Space Entry Program
- Hearing Conservation Program
- Respiratory Protection Program
- Powered Industrial Truck Safety
- Hazard Communication
- HAZWOPER Training
- Contingency Plan
- Environmental Regulations
- Spill Response
- Work Practice Training Program
- DOT Hazardous Material Training
- Sexual Harassment
- Bloodborne Pathogens
- Heat Stress
- Fire Extinguisher Use and Incipient Fire Control

- Fall Protection
- Slip, Trip and Fall Hazard Avoidance
- Proper Lifting Techniques and Back Protection

These topics are also addressed at least annually as part of continuing training programs, with the exception of Powered Industrial Truck Safety which is conducted once every three years and DOT Hazardous Material Training which is conducted periodically.

All new employees will go through at least 6-months of on-the-job training with experienced personnel. All training is documented with records maintained in the facility operating record. Annual refresher training is also conducted and documented. The manual also presents job descriptions with employee qualifications.

The general qualifications and the associated training program elements for key operating positions are provided in the Training Manual (Appendix 13) and are summarized as follows:

Job Description	Qualifications	Training
Refinery Supervisor	Several years experience as a refinery operator, know refinery operations completely and have a high degree of mechanical aptitude.	Basic environmental regulations, chemical handling, contingency plan, lead smelting and recycling, proper clean up procedures, and all Exide safety procedures including lockout tagout, confined space entry, right-to-know, blood lead monitoring, respiratory protection and MSDS.
Refinery Operator	Several years experience in the refining of lead and lead alloys, must be knowledgeable of chemical additives required to produce quality lead and lead alloy.	Basic environmental regulations, chemical handling, contingency plan, lead smelting and recycling, proper clean up procedures, and all Exide safety procedures including lockout tagout, confined space entry, right-to-know, blood lead monitoring, respiratory protection and MSDS.
Caster	On the job training, mobile equipment operations and some basic mechanical aptitude.	Basic environmental regulations, chemical handling, contingency plan, lead smelting and recycling, proper clean up procedures, and all Exide safety procedures including lockout tagout, confined space entry, right-to-know, blood lead monitoring, respiratory protection and MSDS.

Job Description	Qualifications	Training
Laboratory Technician	Basic understanding of chemistry, lead smelting, refining, and instrumentation.	Basic environmental regulations, chemical handling, contingency plan, proper clean up procedures, and all Exide safety procedures including lockout tagout, confined space entry, right-to-know, blood lead monitoring, respiratory protection and MSDS.
Furnace Supervisor	Several years experience in furnace operations, know furnace operations completely and have a high degree of mechanical aptitude.	Basic environmental regulations, chemical handling, contingency plan, lead smelting and recycling, proper clean up procedures, and all Exide safety procedures including lockout tagout, confined space entry, right-to-know, blood lead monitoring, respiratory protection and MSDS.
Furnace Operator	Experience in furnace operations, metallurgy, charging and have a high degree of mechanical aptitude.	Basic environmental regulations, chemical handling, contingency plan, lead smelting and recycling, proper clean up procedures, and all Exide safety procedures including lockout tagout, confined space entry, right-to-know, blood lead monitoring, respiratory protection and MSDS.
Furnace Helper	Experience in furnace operations, and have a high degree of mechanical aptitude.	Basic environmental regulations, chemical handling, contingency plan, lead smelting and recycling, proper clean up procedures, and all Exide safety procedures including lockout tagout, confined space entry, right-to-know, blood lead monitoring, respiratory protection and MSDS.
Wastewater Treatment Plant Operator	Several years experience in treatment plant operations, water and acid chemistry, and equipment maintenance.	Basic environmental regulations, chemical handling, contingency plan, pH calibration and monitoring, proper clean up procedures, and all Exide safety procedures including lockout tagout, right-to-know, blood lead monitoring, respiratory protection and MSDS.

Job Description	Qualifications	Training
Baghouse Operator	Several years experience in baghouse operations and equipment maintenance.	Basic environmental regulations, bag handling, baghouse cleanup procedures, contingency plan, and all Exide safety procedures including lockout tagout, confined space entry, right-to-know, blood lead monitoring, respiratory protection and MSDS.
Dust Reveratory Furnace Operator	Several years experience as an operator, high degree of technical aptitude, know basic elements of baghouse operations.	Basic environmental regulations, contingency plan, furnace operations, clean up procedures, and all Exide safety procedures including lockout tagout, confined space entry, right-to-know, blood lead monitoring, respiratory protection and MSDS.
Slag Stabilization Operator	Several years experience operating the slag stabilization unit, a mobile equipment operator, experience with equipment maintenance.	Basic environmental regulations, contingency plan, slag handling, clean up procedures, and all Exide safety procedures including lockout tagout, confined space entry, right-to-know, blood lead monitoring, respiratory protection and MSDS.
Yard Man	Mobile equipment operator, experience handling, shipping and receiving products.	Basic environmental regulations, contingency plan, incoming hazardous materials handling, clean up procedures, and all Exide safety procedures including lockout tagout, confined space entry, right-to-know, blood lead monitoring, respiratory protection and MSDS.
Yard Foreman	Several years experience working in the yard, high degree of mechanical aptitude.	Basic environmental regulations, contingency plan, hazardous material handling, and all Exide safety procedures including lockout tagout, confined space entry, right-to-know, blood lead monitoring, respiratory protection and MSDS.
CX Battery Breaker Supervisor	Experience working in the battery breaker unit, high degree of mechanical aptitude and chemical knowledge.	Basic environmental regulations, contingency plan, chemical handling, and all Exide safety procedures including lockout tagout, confined space entry, right-to-know, blood lead monitoring, respiratory protection and MSDS.

Job Description	Qualifications	Training
CX Battery Breaker Operator	Complete operator training at Battery Breaker Unit, high degree of mechanical aptitude and chemical knowledge.	Basic environmental regulations, contingency plan, chemical handling, and all Exide safety procedures including lockout tagout, confined space entry, right-to-know, blood lead monitoring, respiratory protection and MSDS.
CX Battery Breaker Dock Leader	Experience working at the battery breaker dock, mobile equipment operator.	Basic environmental regulations, chemical (battery) handling, contingency plan, and all Exide safety procedures including lockout tagout, confined space entry, right-to-know, blood lead monitoring, respiratory protection and MSDS.
CX Battery Breaker Dock Crew	Mobile equipment operator, high degree of mechanical aptitude.	Basic environmental regulations, chemical (battery) handling, contingency plan, and all Exide safety procedures including lockout tagout, confined space entry, right-to-know, blood lead monitoring, respiratory protection and MSDS.
Mechanic	High degree of mechanical aptitude.	Basic environmental regulations, chemical handling, contingency plan, and all Exide safety procedures including lockout tagout, confined space entry, right-to-know, blood lead monitoring, respiratory protection and MSDS.
Electrician	High degree of electrical knowledge and mechanical aptitude.	Basic environmental regulations, chemical handling, contingency plan, and all Exide safety procedures including lockout tagout, confined space entry, right-to-know, blood lead monitoring, respiratory protection and MSDS.
Welder	Welding experience and mechanical aptitude.	Basic environmental regulations, chemical handling, contingency plan, and all Exide safety procedures including lockout tagout, confined space entry, right-to-know, blood lead monitoring, respiratory protection and MSDS.

Job Description	Qualifications	Training
Change House, Lunchroom and Respirator Maintenance Operator	Be able to follow specific procedures and cleaning instructions.	Basic environmental regulations, chemical handling, contingency plan, proper clean up procedures, and all Exide safety procedures including lockout tagout, confined space entry, right-to-know, blood lead monitoring, respiratory protection and MSDS.
Yard Supervisor	Several years of experience working in the yard, high degree of mechanical aptitude	Basic environmental regulations, hazardous material handling, contingency plan, and all Exide safety procedures including lockout tagout, confined space entry, right-to-know, blood lead monitoring, respiratory protection and MSDS.

- M. a copy of the closure plan and, where applicable, the post-closure plan required by LAC 33:V.3511, 3523, and 1915. Include, where applicable, as part of the plans, specific requirements in LAC 33:V.1915, 2117, 2315, 2521, 2719, 2911, 3121, 3203 and 3207;**

**Response**

Exide has developed a Closure and Post-Closure Plan that details the procedures that will be followed for closing all of the permitted hazardous waste units at the Baton Rouge smelter. Appendix 8 is Exide's Closure and Post-Closure Plan. The plan describes the closure procedures that will be used for the Slag Stabilization area, Containment Building, K069/D008 Storage Area, Truck/Trailer Storage Area and Whole Battery Storage Area including removing any existing waste, decontamination, sampling and analysis and documentation. The plan also includes cost estimates for the closure procedures. The cost estimates take into account the additional cost for closure of the Containment Building resulting from the upgrades in the floor construction at Area 2. Post-closure care activities are not required for the hazardous waste units as they will be clean closed. The plan also includes post-closure care procedures and cost estimates for the two closed hazardous waste piles. The post-closure care procedures include cap integrity inspections, maintenance of the cap, and groundwater monitoring.

- N. for hazardous waste disposal units that have been closed, documentation that notices required in LAC 33:V.3517 have been filed;**

**Response**

The required notice for two closed hazardous waste cells located at the Baton Rouge smelter was filed on July 8, 1988. Any additional closures will be accompanied by the notices required in LAC 33:V.3517.





### **Response**

Figure 18 presents a wind rose for the area surrounding the Baton Rouge smelter.

#### **T. facility location information:**

1. **Seismic Standard.** In order to determine the applicability of the seismic standard, LAC 33:V.1503.A.3, the owner or operator of the facility must identify the political jurisdiction (e.g., parish, township, or election district) in which the facility is proposed to be located.

### **Response**

The Baton Rouge Smelter is located in East Baton Rouge Parish, Louisiana approximately 2 miles west of Highway 61.

- a. **The owner or operator shall demonstrate compliance with the seismic standard.** This demonstration may be made using either published geologic data (including federal hazardous waste regulations) or data obtained from field investigations carried out by the applicant. The information provided must be of such quality to be acceptable to geologists experienced in identifying and evaluating seismic activity. The information submitted must show that either:

### **Response**

A review has been performed of the following publications and documents:

- Fault and Salt Map of Southern Louisiana (W.E. Wallace, 1982)
- Active Faults in East Baton Rouge Parish Louisiana (Richard P. McCulloh, 2001)
- Partial Report for Gulf-Margin Normal Faults, Louisiana and Arkansas (USGS Publication No. 1022)
- Geohydrology of the Shallow Aquifers of Baton Rouge, Louisiana (C.G. Smith 1969)
- USGS Quadrangle Map
- Project Specific Aerial Photographs
- July 2005 e-CFR Listing of Political Jurisdictions that require a demonstration of compliance with 40 CFR 264.186)

Based on that review a belt of normal faults exists between Florida and Texas that includes a series of south facing, east-west oriented normal faults in East Baton Rouge Parish. The Fault and Salt Map of Southern Louisiana (W.E. Wallac,

1982) depicts these faults and distinguishes between "Tuscaloosa Faults" and "Tertiary Faults."

The USGS information indicates that a significant period of faulting occurred in the early to mid-Mesozoic (Triassic/Jurassic) and it is inferred that the Tuscaloosa Faults are the result of growth faulting and salt tectonism at this time. The USGS Publication, states that the Tertiary Faults are the result of rapid Quaternary sedimentation. The closest mapped Tertiary Faults are the Denham Springs Fault located approximately 3 miles south of the Site and the Alsen Fault located approximately 6 miles north of the Site.

The review of the aerial photographs and topographic maps did not reveal the presence of pronounced scarps or other linear features within 3000 ft of the Site that are indicative of recent fault activity. A certification for this review is provided in Appendix 27 as Response Attachment A27. The e-CFR listing did not include any Political Jurisdictions in Louisiana.

- i. no faults which have had displacement in Holocene time are present, or no lineations which suggest the presence of a fault (which have displacement in Holocene time) within 3,000 feet of a facility are present, based on data from:**

  - (a) published geologic studies, including cites from federal regulations which demonstrate that the requirements of this Section do not apply,**
  - (b) aerial reconnaissance of the area within a five-mile radius from the facility,**
  - (c) an analysis of aerial photographs covering a 3,000-foot radius of the facility, and**
  - (d) if needed to clarify the above data, a reconnaissance based on walking portions of the area within 3,000 feet of the facility, or**
- ii. no faults may pass within 200 feet of the portions of the facility where treatment, storage, or disposal of hazardous waste will be conducted based on data from a comprehensive geologic analysis of the site. Unless a site analysis is otherwise conclusive concerning the absence of faults within 200 feet of such portions of the**

facility, data shall be obtained from a subsurface exploration (trenching) of the area within a distance no less than 200 feet from portions of the facility where treatment, storage, or disposal of hazardous waste will be conducted. Such trenching shall be performed in a direction that is perpendicular to known faults (which have had displacement in Holocene time) passing within 3,000 feet of the portions of the facility where treatment, storage, or disposal of hazardous waste will be conducted. Such investigation shall document with supporting maps and other analyses, the location of any faults found, and shall be certified by an independent Louisiana registered professional engineer or geologist.

**Response**

The determination has been made as part of T.1.a.i that no active faults occur within 3,000 ft of the facility. Therefore, a site-specific field investigation was not required.

**2. 100-year floodplain**

- a. Owners and operators of all facilities shall provide an identification of whether the facility is located within a 100-year floodplain.

**Response**

Based on the most recent Flood Insurance Rate Map (Figure 9, May 17, 1993), Exide is an existing facility located in Zone X, an area of minimal flooding. The developed site is above the 100-year flood plain. The elevation of the active portion of the site is between 85- and 75-feet above mean sea level (MSL). Site records indicate that there have been no flooding incidents in the active portion of the facility, including during major storm events such as Tropical Storm Isidore and Hurricane Lili in 2002.

- b. Owners and operators of facilities located in the 100-year floodplain must provide the following information:
- i. the 100-year flood level and any other special flooding factors (e.g., wave action) which must be considered in designing, constructing, operating, or maintaining the facility to withstand washout from a 100-year flood;

- ii. engineering analysis to indicate the various hydrodynamic and hydrostatic forces expected to result at the site as a consequence of a 100-year flood;
- iii. structural or other engineering studies showing the design of operational units (e.g., tanks, incinerators) and flood protection devices (e.g., floodwalls, dikes) at the facility and how these will prevent washout;
- iv. if applicable, and in lieu of the above two provisions, a detailed description of procedures to be followed to remove hazardous waste to safety before the facility is flooded, including:
- v. timing of such movement relative to flood levels, including estimated time to move the waste, showing that such movement can be completed before floodwaters reach the facility;
- vi. a description of the location(s) to which the waste will be moved and demonstration that those facilities will be eligible to receive hazardous waste in accordance with LAC 33:V.Subpart 1;
- vii. the planned procedures, equipment, and personnel to be used and the means to ensure that such resources will be available in time for use; and
- viii. the potential for accidental discharges of the waste during movement.

**Response**

This section is not applicable since Exide is not located within the 100-year flood plain.

- c. existing facilities *not* in compliance with LAC 33:V.1503.B.3 shall provide a plan showing how the facility will be brought into compliance and a schedule for compliance.

**Response**

This section is not applicable since Exide is not located within the 100-year flood plain.

**3. site geology, including:**

- a. certification by a geologist or independent Louisiana registered professional engineer specializing in geotechnical engineering that the ground and subsurface conditions at the site are acceptable for the planned purposes of the facility;**

**Response**

Exide is an existing facility. Prior to the initial Part B permit application the facility contracted a certified geotechnical engineer to perform a subsurface characterization and certify the facility as specified in LAC 33:V.517.T.3.a. A copy of the geology report and associated boring logs is included in Appendix 10.

Review of the boring logs indicates that approximately the upper 30 feet consists of a bedded stiff brown to light gray silty clay and reddish-brown clay (CH-CL). Between 25 and 35 feet bgs are tan silty sand layers with interfingering clay layers. The geotechnical engineer indicated that these layers of silty clay, clayey silt, sandy silt and silty sand did not appear to be continuous across the site. The borings were generally completed at a depth of 50 feet bgs with little moisture observed (18 to 33%). In one boring, EB-5, water was observed to enter the borehole at 10 feet bgs. Some trace organic pockets and ferrous and calcareous nodules were observed in various layers and boring across the site.

- b. identification of the uppermost aquifer and aquifers hydraulically interconnected beneath the facility property, including groundwater flow direction and rate, and the basis for such identification (i.e., the information obtained from hydrogeologic investigations of the facility area);**

**Response**

Subsurface geologic and hydrogeologic information included in this permit renewal application was taken from subsurface investigations performed at the facility since 1980. Summary information for subsurface conditions is reproduced from the original RCRA Part B permit application and supplemental information from the 1993 RCRA Part III Permit modification and the 1997 permit application for the solid waste landfill. Based on that information, the Baton Rouge smelter is underlain by natural soils of low permeability with some interbedded units of clayey sands, sandy clays, and sands.

The top of the uppermost aquifer (first competent permeable zone) is encountered at elevations of approximately 28 to 32 feet msl, and the base of the aquifer is encountered at elevations of approximately 20 to 25 feet msl. The thickness of this zone ranges from approximately 3 to 25 feet. The uppermost aquifer zone consists of interbedded fine-grained sand, sandy-clay, clayey-sand and silty sand. The soil boring logs are provided in Appendix 10.

Based on information obtained from the existing groundwater monitoring wells at the Site, the depth to groundwater ranges from approximately 2.5 ft at the western end of the site to 29 feet at the eastern end of the site. Groundwater within the uppermost water table aquifer flows toward and is hydraulically connected with the Baton Rouge Bayou and the Mississippi River. Flow rates within the uppermost aquifer zone vary based on the permeability and gradient.

Hydraulic testing conducted by Exide at closed hazardous waste cell monitoring wells indicates that the uppermost water bearing zone at the site has an average hydraulic conductivity of 1.257 feet per day and an average transmissivity of 17.52 square feet per day. Groundwater flow at the site is primarily to the northwest with a typical groundwater velocity of 20 feet per year. This flow rate and direction of groundwater flow have been consistent for approximately 15 years.

- c. **soil types, textures, and conditions to depth of thirty feet below lowest elevation of planned disposal cells for impoundments, landfill and land treatment facility based on test holes at 200-foot intervals (or greater or less intervals if acceptable to the administrative authority);**

**Response**

No hazardous waste disposal cells, impoundments, landfills, or land treatment facilities are planned. Solid waste disposal facilities may be required as part of future facility operations; however, no specific plans have been set at this time. Approvals will be applied for when appropriate.

- d. **logs of test holes and wells, including soil samples for each pertinent strata analyzed for soil type, texture, permeability, and other pertinent characteristics;**

**Response**

Soil boring logs and a site geology report from the facility are included in Appendix 10.

- e. **general area map and cross sections indicating the extent of freshwater sands, and the degree of isolation of these aquifers to a depth of 1,000 feet from waste sources by confining layers of clay;**

**Response**

The relationship of the facility hazardous waste management units and the fresh water sands within a depth of 1,000 feet has not been determined through site specific borings or geophysical data. It is known that the backup well that the facility uses to withdraw groundwater (LADOTD No. 748) is 1,278 feet deep with a 50-ft screen from 1,228 feet to 1,278 feet. The October 1969 Bulletin for the Louisiana Water Resources Institute (include as part of Appendix 10) shows that the 400 ft sand and 600 ft sand are combined in the vicinity of the Site. When the site location is superimposed onto a north-south cross-section (Figure 3 in the 1969 Bulletin) the top and bottom of the combined sands are approximately -125 MSL and -425 MSL respectively. No deeper information can be drawn from the documents reviewed during preparation of this permit renewal application.

Although not depicted on the October 1969 cross-section, the original RCRA permit application states that additional sands beneath the Site are the 1,200-foot aquifer, 1,500-foot aquifer and the 2,000-foot aquifer. The names identify the individual sand units, but do not necessarily represent the actual depth to the aquifer. Based on a US Geological Survey Water Resources Bulletin (Technical Report 48, Plate 4). The 1,200 ft sand is encountered at approximately elevation -870 MSL (950 feet below the permitted units). The 1,500 ft and 2,000 ft aquifers are deeper than 1,000 ft. According to Map No. 13 of the Aquifer Recharge Atlas ("Aquifer Recharge Potential for the Baton Rouge Quadrangle, 1988), the facility is mapped as a low to moderate recharge potential.

- f. **on a topographic map, a delineation of the waste management area, the property boundary, the proposed "point of compliance" as defined under LAC 33:V.3311, the proposed location of groundwater monitoring wells as required under LAC 33:V.3315.A and B; and**

**Response**

The topographic map in Figure 5 shows the waste management area of the facility, the property boundaries and the location of the groundwater monitoring wells. A point of compliance is not required as Exide is not required to have a groundwater monitoring system for the hazardous waste management units. A groundwater detection monitoring system is maintained for the two closed hazardous waste piles.

- g. **detailed plans and an engineering report describing the proposed groundwater monitoring program to be implemented to meet the requirements of LAC 33:V.3315.A-H.**

**Response**

Although Exide is not required to have a groundwater monitoring system in place for the container storage areas, the containment building, or the slag treatment unit, the details of the existing detection monitoring program required for the closed hazardous waste piles are outlined in the comprehensive Groundwater Sampling and Analysis Plan included as Appendix 7. The Groundwater Sampling and Analysis Plan includes the well network, groundwater sampling procedures, documentation, decontamination, cross-contamination control, analytical parameters, field and laboratory QA/QC procedures, well maintenance and reporting.

**4. site hydrology, including:**

- b. **travel times in feet/day for normal drainage of each natural surface drainage system within 1,000 feet of the property;**

**Response**

As shown on Figure 2, the Baton Rouge Bayou flows within 1,000 ft of the Exide facility to the north and west of the area containing the RCRA permitted units. The bayou flows into Devil's Swamp and then into the Mississippi River. Baton Rouge Bayou has been estimated to receive drainage from 83 square miles. Data from Baton Rouge Bayou suggests that the flow is approximately 10 cubic feet per second (CFS) in low flow to 150 CFS during times of high flow. This is approximately 200 to 6,000 feet per day.

**c. climate factors:**

- i. **the 24-hour/25-year storm rainfall;**

**Response**

The U.S. Department of Commerce's Rainfall Frequency Atlas (Technical Paper 40) as reported in 1997 indicates that the 24-hour/25-year rainfall is approximately 12 inches in the vicinity of the facility.

- ii. **maximum, minimum, and average temperature/month for past 10 years;**



### **Response**

Climatological data for 1995 to 2004 is provided as Appendix 28. During that period the monthly average temperature was a maximum of 78.3 degrees F and a minimum of 57.2 degrees F with a monthly average temperature of 67.8 degrees F. August is the month with the highest average (92.2 degrees F) and January is the month with the lowest average (40.9 degrees F).

### **iii. impact of previous hurricanes on area;**

### **Response**

Although the facility is located in an area subject to hurricanes, they are infrequent and have resulted in minimal damage. Exide facilities have been designed and constructed to withstand storms and hurricanes. The facility, in its current form, has withstood several hurricane and tropical storm events with little or no damage including Tropical Storm Isidore and Hurricane Lili in 2002. A hurricane isoline map is provided in Appendix 19.

### **iv. comparison of rainfall and evapotranspiration rates; and**

### **Response**

The Baton Rouge Smelter is located in a region that is characterized by a humid, subtropical climate with relatively high rainfall. According to information obtained from the National Climate Data Center, the average annual rainfall for the period of 1995 to 2004 is approximately 58.2 inches. Heavy, short duration rainfall occurs during hurricanes and tropical depressions. Climatology information is provided as Appendix 28. According to Evaporation Maps for the United States (Technical Paper No. 37) by the US Weather Bureau dated 1959, the mean evapotranspiration rate for the area is 44.7 inches annually.

### **v. prevailing wind direction (provide wind rose);**

### **Response**

The prevailing wind (42.7%) comes from the south, southeast and east. A wind rose is included as Figure 18.

- d. a description of any plume of contamination that has entered the groundwater from a regulated unit at the time that the application is submitted that:
  - i. delineates the extent of the plume on the topographic map such as required under LAC 33:V.521.B.4; and
  - ii. identifies the concentration of each Table 4, LAC 33:V.Chapter 33, constituent throughout the plume or identifies the maximum concentrations of each such constituent in the plume;

## Response

No plume of contamination is known to have entered the groundwater from the Exide facility.

- e. if the presence of hazardous constituents have not been detected in the groundwater at the time of permit application, the owner or operator must submit sufficient information, supporting data, and analyses to establish a detection monitoring program which meets the requirements of LAC 33:V.3317. This submission must address the following items specified under LAC 33:V.3317:**
- i. a proposed list of indicator parameters, waste constituents, or reaction products that can provide a reliable indication of the presence of hazardous constituents in the groundwater;**
  - ii. a proposed groundwater monitoring system;**
  - iii. background values for each proposed monitoring parameter or constituent, or procedures to calculate such values; and**
  - iv. a description of proposed sampling, analysis, and statistical comparison procedures to be utilized in evaluating groundwater monitoring data.**

## Response

It is not a requirement of the current Hazardous Waste Permit to have a groundwater monitoring system in place for the Containment Building or storage units. The details of the existing detection monitoring program required for the two closed hazardous waste piles are outlined in the

comprehensive Groundwater Sampling and Analysis Plan included as Appendix 7. The Plan includes the monitoring well network, sampling procedures, documentation, decontamination, cross-contamination control, analytical parameters, field and laboratory QA/QC, well maintenance and reporting.

- f. if the presence of hazardous constituents has been detected in the groundwater at the point of compliance at the time of permit application, the owner or operator must submit sufficient information, supporting data, and analyses to establish a compliance monitoring program which meets the requirements of LAC 33:V.3319. The owner or operator must also submit an engineering feasibility plan for a corrective action program necessary to meet the requirements of LAC 33:V.3321. To demonstrate compliance with LAC 33:V.3319, the owner or operator must address the following items:**

  - i. a description of the wastes previously handled at the facility;**
  - ii. a characterization of the contaminated groundwater, including concentrations of hazardous constituents;**
  - iii. a list of hazardous constituents for which compliance monitoring will be undertaken in accordance with LAC 33:V.3315 and 3317;**
  - iv. proposed concentration limits for each hazardous**
  - v. constituent, based on the criteria set forth in LAC 33:V.3309.A, including a justification for establishing any alternate concentration limits;**
  - vi. detailed plans and an engineering report describing the proposed groundwater monitoring system, in accordance with the requirements of LAC 33:V.3315; and**
  - vii. a description of proposed sampling, analysis, and**
  - viii. statistical comparison procedures to be utilized in evaluating groundwater monitoring data;**

### **Response**

Exide has not detected hazardous constituents in the groundwater above historical ranges. Exide submitted a Phase I RFI Work Plan on November 16, 2001 to investigate the extent of soil contamination associated with the four SWMUs at the Baton Rouge smelter. As comments or approval have not yet been received from LDEQ, RFI activities have not yet begun.

- g. if hazardous constituents have been measured in the groundwater which exceed the concentration limits established under LAC 33:V.3309, Table 1, or if groundwater monitoring conducted at the time of permit application under LAC 33:V.3301-3309 at the waste boundary indicates the presence of hazardous constituents from the facility in groundwater over background concentrations, the owner or operator must submit sufficient information, supporting data, and analyses to establish a corrective action program which meets the requirements of LAC 33:V.3321. To demonstrate compliance with LAC 33:V.3321, the owner or operator must address, at a minimum, the following items:**

  - i. a characterization of the contaminated groundwater, including concentrations of hazardous constituents;**
  - ii. the concentration limit for each hazardous constituent found in the groundwater as set forth in LAC 33:v.3309;**
  - iii. detailed plans and an engineering report describing the corrective action to be taken; and**
  - iv. a description of how the groundwater monitoring program will demonstrate the adequacy of the corrective action.**

### **Response**

Exide has not detected hazardous constituents in the groundwater above historic ranges.

## **5. Environmental factors, including:**

- a. list all known historical sites, recreational areas, archaeological sites, wildlife areas, swamps and**

**marshes, habitats for endangered species, and other sensitive ecological areas within 1000 feet of the site; and**

**Response**

There are no known historical sites, recreational areas, archaeological sites, designated wildlife-management areas, swamps and marshes, or other sensitive ecological areas within 1,000 feet of the site. Information has been received that the pallid sturgeon and its habitat in the Mississippi River may be affected by the facility. However, impacts are due to loss of habitat caused by construction of dams that have modified flows, reduced turbidity and lowered water temperatures. As Exide does not plan to construct any dams or otherwise impede flow through Baton Rouge Bayou, the proposed permit renewal should not impact the pallid sturgeon. Exide will continue to avoid any degradation of water quality in the Mississippi River. No other potential impacts to rear, threatened or endangered species or critical habitats were identified. Wetlands have been identified within 1,000 feet of the site; however, they are isolated from the active portion of the facility. Documentation from July 2005, the 1993 RCRA Part II Permit Application, and the 1997 Solid Waste Permit Application for New Landfill are included in Appendix 21.

- b. indicate measures planned to protect such areas listed from detrimental impact from the operation of the proposed facility.**

**Response**

There are no known historical sites, recreational areas, archaeological sites, designated wildlife-management areas, swamps and marshes, or other sensitive ecological areas within 1,000 feet of the site. Information has been received that the pallid sturgeon and its habitat in the Mississippi River may be affected by the facility. However, impacts are due to loss of habitat caused by construction of dams that have modified flows, reduced turbidity and lowered water temperatures. As Exide does not plan to construct any dams, therefore, the proposed permit renewal should not impact the pallid sturgeon. Exide will continue to avoid any degradation of water quality in the Mississippi River. No other potential impacts to rare, threatened or endangered species or critical habitats were identified. Wetlands have been identified within 1,000 feet of the site; however, they are isolated from the active portion of the facility. Isolation is the method used to protect these areas for detrimental impact from operations.

Documentation from July 2005, the 1993 RCRA Part II Permit Application, and the 1997 Solid Waste Permit Application for new landfill are included in Appendix 21.

**6. Geographical Factors. For an area within two miles of the proposed site, provide the following:**

- a. map or aerial photograph showing all buildings identified as residential, commercial, industrial, or public (schools, hospitals, libraries, etc.);**

**Response**

Exide has included a 1000-Scale Aerial Map (Figure 7) showing all of the onsite features and the surrounding land use for 2-miles of the site.

- b. population;**

**Response**

There are less than 100 people living within a 2-mile radius of the site and approximately 23,456 people living within a 3 mile radius of the site.

- c. principal livelihood of residents for facilities located in rural areas;**

**Response**

The principal livelihood of residents in the area is working at the industrial facilities in the vicinity of North Baton Rouge.

- d. land use; and**

**Response**

Surrounding land use is shown in Figure 7. The area to the east of the facility is industrial, the land use to the north and west is primarily undeveloped wooded or swamp lands. Immediately south of the facility is the NPC superfund site. In 1997, the surrounding land use within a 3 mile radius was determined using USGS 7.5 minute quadrangle maps as follows: residential, 15%; health care facilities and schools, 1%; agricultural, 15%; industrial and manufacturing, 12%; other commercial, 8%; recreational, 2% and undeveloped, 47%.

- e. road network, with average daily traffic count and route of trucks which will transport waste to the facility.**

**Response**

The Exide facility is located at the end of Brooklawn Drive, off LA Hwy 61. Brooklawn Drive is a Parish maintained road which provides access to several industrial facilities including Union Tank Cars, Great Lakes Carbon and NPC. Both sides of Brooklawn Drive are sparsely developed and essentially all traffic on Brooklawn Drive is related to these industries.

Exide will have on a typical day up to 30 trucks (tractor trailers) onsite to unload spent lead acid batteries and pickup recycled lead blocks or bars. Approximately 120 autos will use Brooklawn Drive for access to the industrial facilities.

**7. Operations plan, including:****a. classification and estimated quantities of wastes to be handled;****Response**

Please see the table below for the classification and estimated quantities of wastes handled at the facility.

**Hazardous Waste Materials**

<u>Type Material</u>	<u>Code</u>	<u>Estimated Annual Quantity Handled</u>
Spent Lead Acid Batteries	D002, D008	250,000 tons
Lead residues, sludges, plant scraps & other Group I lead bearing hazardous waste	D008	24,000 tons
Lead residues, sludges, slags, and other Group I lead bearing hazardous waste with impurity-level other metal content	D008 (D004, D006, D007, D010, D011)	1,000 tons
Emission control dust from Secondary Lead Smelters	K069	1,000 tons
Group II Recyclable lead bearing materials	D008	30,000 tons
Refractory Brick	D006, D008	200 tons
Spent nickel-cadmium batteries	D006	250 tons
Battery Components	D008	125,000 tons
Blast Furnace Slag	D008	20,000 tons

**b. methods and processes utilized:****i. facility capacity for each disposal method;****Response**

Exide is not a hazardous waste disposal facility; therefore, this section is not applicable.

ii. **detailed description of each process or method:**

**Response**

The Baton Rouge smelter recycles spent lead-acid batteries and other lead bearing materials. The flow of material for recycling is illustrated in Figure 1, the Process Flow Diagram, that shows the steps taken in the recycling process. The recycling process begins with the receipt of materials. Batteries and other lead-bearing materials are received in tractor-trailers. The trailers are weighted in at the guard house scale, inspected and logged in before they enter the gate. The materials are then directed to the Battery Breaker Unit to be unloaded. Batteries are received on pallets secured with shrink wrap. The pallets are unloaded using forklifts. The batteries are loaded into a stainless-steel vibrating screen and then dumped into an inclined belt. Batteries are processed in the Battery Breaker Unit by crushing them in a hammer mill and hydraulically separating the component parts. The sulfuric acid is neutralized and crystallized to form a sodium sulfate salt that is sold a product. The plastic from the battery casings is washed and shipped off-site to make new batteries. The lead paste is recycled on-site to produce metallic lead for making new batteries. Lead oxide paste is a red-brown, high density solid material with a moisture content less than 5%.

If the batteries are not immediately recycled, they are stored in two permitted storage areas. The Whole Battery Storage Area is located directly north of the Battery Breaker Area. When the breaker unit is down for repairs or maintenance, the batteries are unloaded onto this storage unit. Batteries are stored on pallets at the Whole Battery Storage Area.

The Truck/Trailer Storage Area is a parking area located between the guard house and the Battery Breaker Area. The Truck/Trailer Storage Area is designed to hold batteries and other lead-bearing materials in tractor trailers. This unit allows Exide the flexibility of leaving a trailer in to the permitted storage area and processing the batteries at a later date.

The majority of other recyclable materials such as battery plates, lead oxide, metallic lead, drosses, baghouse dust, metallic lead waste and scrap are



received in either in steel drums or Gaylord boxes. The material is weighed in at the Exide scale and sent to the loading dock to be unloaded. Drums are taken to the feed pile area where they are dumped and the contents inspected. The empty drums are washed, crushed and sent off-site to be recycled. Empty boxes are recycled in the blast furnace. The lead-bearing material is processed in the blast furnace or the reverberatory furnace. Slag generated by the reverberatory furnace is then refined to further recover lead.

Slag generated by the blast furnace is sorted and either further recycled to recover lead or disposed of. The disposal fraction of the blast furnace slag does not have a lead content high enough for recycling to occur. The disposal fraction is crushed into small pieces and feed into the slag stabilization unit where it is treated with Portland cement and sodium silicate. Treatment occurs on a batch basis by mixing the slag with the cement and sodium silicate. The pugmill mixes the slag until it is treated evenly. The treated material is a granular soil-like material. The stabilized slag is disposed of in Exide's permitted on-site solid waste landfill. The stabilized slag is transported in the landfill in trucks.

All water generated by the facility, including wash-down water, and laundry and shower water is treated in the facility Water Treatment Unit. The water is pumped through a filter press to remove particulate, neutralized with sodium hydroxide, and a flocculent is added to precipitate solids. The treated water is then clarified to remove solids, then filtered in sand filters prior to discharge through permitted Outfall 001.

**iii. storage and disposal procedures:**

- (a) plans for receipt, checking, processing, segregation of incompatible wastes, and odor control; and**

**Response**

The Baton Rouge smelter recycles spent lead-acid batteries and other lead bearing materials. The recycling process begins with the receipt of materials. Batteries and other lead-bearing materials are received in tractor-trailers. The trailers are weighed in at the guard house

scale, inspected and logged in before they enter the gate. The materials are then directed to the Battery Breaker Unit to be unloaded. Batteries are received on pallets secured with shrink wrap. The pallets are unloaded using forklifts. The batteries are loaded into a stainless-steel vibrating screen and then dumped into an inclined belt. Batteries are processed in the Battery Breaker Unit by crushing them in a hammer mill and hydraulically separating the component parts. The sulfuric acid is neutralized and crystallized to form a sodium sulfate salt that is sold a product. The plastic from the battery casings is washed and shipped off-site to make new batteries. The lead paste is recycled on-site to produce metallic lead for making new batteries. Lead oxide paste is a red-brown, high density solid material with a moisture content less than 5%.

If the batteries are not immediately recycled, they are stored in two permitted storage areas. The Whole Battery Storage Area is located directly north of the Battery Breaker Area. When the breaker unit is down for repairs or maintenance, the batteries are unloaded onto this storage unit. Batteries are stored on pallets at the Whole Battery Storage Area.

The Truck/Trailer Storage Area is a parking area located between the guard house and the Battery Breaker Area. The Truck/Trailer Storage Area is designed to hold batteries and other lead-bearing materials in tractor trailers. This unit allows Exide the flexibility of storing a trailer in the permitted storage area and process the batteries at a later date.

The majority of other recyclable materials such as battery plates, lead oxide, metallic lead, drosses, baghouse dust, metallic lead waste and scrap are received in either in steel drums or Gaylord boxes. The material is weighed in at the Exide scale and sent to the loading dock to be unloaded. Drums are taken to the feed pile area where they are dumped and the contents inspected. The empty drums are

washed, crushed and sent off-site to be recycled. The lead-bearing material is processed in the blast furnace or the reverberatory furnace. Slag generated by the reverb furnace is then refined to further recover lead.

The Containment Building (Figure 6) is comprised of three main areas. Area 1 is the Raw Material Storage Area. This area is utilized for the storage and mixing of dry hazardous wastes, scrap metals, drosses, slag, pastes, and battery components. Area 2 is the Paste Storage Area which is used for the initial staging of desulfurized lead pastes from the battery breaking/desulfurization process prior to moving the paste to the Raw Material Storage Areas for mixing and staging. The paste stored in this area is visibly moist and may contain free liquids. Areas 1 and 2 store hazardous waste prior to processing through the furnaces in the Production Area of the plant (Area 3).

Most of the spent lead acid storage batteries received are fed directly into battery breaker units. During peak operational periods, the batteries may be stored in either the Truck/Trailer storage areas or the Whole Battery Storage Area.

As discussed in Chapter 21, the Truck/Trailer container area has an impervious base which is sloped to a collection sump and is bermed to contain the liquid from 10 percent of the stored batteries plus a 25 year-24 hour rain event. Collected water from the sump is pumped to the wastewater treatment plant for treatment.

The Whole Battery Container Storage Area has an impervious base which is sloped to a collection sump. The area is bermed to collect 10 percent of the liquid in the batteries and is under roof to preclude run on or run off. Any liquid collected in the sump is pumped to the battery breaker unit for neutralization prior to pumping to the wastewater treatment plant.

Spent batteries are neither ignitable, reactive, or incompatible.

During normal operations, battery plates/oxides/lugs are drained at the battery breaking operation and transported to the Paste Storage Area (Area 2) of the Containment Building. Area 2 is used for the initial staging of neutralized lead paste (paste) from the battery breaking/desulfurization process prior to moving the paste to the Raw Material Storage Areas (Area 1) for mixing and staging prior to processing through the furnaces in the Production Area (Area 3) of the plant. The paste stored in this area may contain free liquids. The materials stored in the Containment Building are not ignitable, reactive, or incompatible.

Proposed upgrades for Area 2 presented in the October 17, 2001 permit modification include a sloped primary barrier consisting of 6 inches of concrete, an HDPE liner and acid brick to prevent migration of hazardous constituents. Drainage from this primary barrier system is directed to sumps to minimize the accumulation of free liquids on the primary barrier. Beneath the primary barrier is a secondary barrier and leak detection system which consists of a granular drainage layer with perforated PVC collection lines that is constructed to interrupt any liquids that may penetrate the primary liner systems. Beneath the granular drainage layer is a 1.5-inch layer of asphalt and a 6-inch layer of concrete that acts as a secondary barrier layer to prevent migration of hazardous constituents. Drawings of this design are included as Appendix 25. The upgrades were completed in November 2003 and the certification report is provided in Appendix 11C.

Area 1 is utilized for the storage of lead materials containing no free liquids such as battery components, indigenous wastes, and slag. These materials are not ignitable, reactive, or incompatible. This area is constructed of an impermeable concrete

primary barrier. The floors and walls of Area 1 are the primary barrier system. The primary barrier system is constructed of man-made materials designed to withstand the movement of and contact with personnel, waste, and handling equipment during the operating life of the unit and are appropriate for the physical and chemical characteristics of the lead bearing materials to be managed. Sketches of the floor constructions in the storage area (Area 1) are included with the professional engineer's certification documents in Appendix 11. These sketches depict the area's barrier system.

Battery plates/oxide/lugs received from off-site are also stored in the dry Containment Building storage area. These materials are not ignitable, reactive, or incompatible. These lead bearing materials do not contain free liquids but do contain some moisture which inherently prevents/controls fugitive emissions. However Exide does use wetting to control dust on the roadway/traffic areas in compliance with OSHA lead standard and the secondary lead smelter NESHAP standard.

Exide will conduct weekly inspections of the Containment Building and the storage units as detailed in the Inspection Plan and Schedule in Appendix 5 to insure that the units are being operated properly and that no leaks/releases have occurred to the air, ground, or water. The Inspection Plan includes daily, weekly, monthly and quarterly inspections and the associated documentation procedures.

K069 and D008 wastes are received and stored in the K069/D008 container storage area. These materials are packaged in sealed containers and placed on pallets. The materials are neither ignitable, reactive or incompatible and do not contain free liquids.

Finally, Exide has a Dust Suppression procedure, the details of which are included in Appendix 12. Fresh water sprays are used as needed to control dust in Area 1 of the

Containment Building. Incompatible wastes are not received at the Containment Building and odor control is not necessary as lead bearing wastes typically do not generate odors.

- (b) **life of each facility based on projected use;**

**Response**

Exide is an ongoing entity. Storage of recyclable material will continue as long as the facility is operational. Operation of the facility and associated waste management units is expected to continue for a minimum of thirty years. For permitting purposes, the approximate timeframe that the facility is expected to continue operation is until the year 2021; however this date may be extended.

- (c) **describe recordkeeping procedures, types of records to be kept, and use of the records by management to control the operation; and**

**Response**

Exide maintains all required environmental records in the facilities' Environmental Office. Records include manifests of both incoming and outgoing hazardous waste, Annual Hazardous Waste Reports, Waste Acceptance information, training records, copies of all permits, permit modifications and correspondence from the regulatory agencies, inspection records, NOD and Compliance Orders, groundwater monitoring data and reports, closure cost estimates, financial assurance documents, certificates of insurance, operating records, current WH-1 form and change of ownership records.

- (d) **monitoring and recording of incoming wastes;**

**Response**

Exide has a strict screening process that lead bearing material generators must comply with prior to the material being accepted by the Baton Rouge smelter. This screening process

includes the analysis and review of new waste streams prior to receipt, to verify chemical and physical characteristics, and the completion of waste profiles. The waste screening process is discussed in detail in the Waste Analysis Plan in Appendix 4. Exide documents the weight of each shipment of spent lead-acid batteries and other lead-bearing materials received. Loads are visually inspected and analyzed for total lead at arrival to confirm the material matches the manifest.

- U. Special Requirements. Administrative authority may require additional provisions for special procedures or processes, for specific information for a supplementary environmental analysis, or for such information as may be necessary to enable the administrative authority to carry out his duties under other state laws;**

**Response**

Exide acknowledges, understands and will comply with the above and will provide to the Administrative Authority any additional information requested for a supplementary environmental analysis or for any other purpose that may be necessary to enable the Administrative Authority to carry out his duties under other state laws.

- V. for land disposal facilities, if an approval has been granted under LAC 33:V.2239, a petition has been approved under LAC 33:V.2241 or 2271, or a determination made under LAC 33:V.2273, a copy of the notice of approval or a determination is required; and**

**Response**

Exide does not have active land disposal facilities for hazardous waste; therefore, this citation does not apply.

- W. a summary of the pre-application meeting, along with a list of attendees and their addresses, and copies of any written comments or materials submitted at the meeting, as required under LAC 33:V.708.A.3.**

**Response**

The Pre-application Meeting Minutes will be presented if a pre-application meeting is conducted.

4. a description of how the groundwater monitoring program will demonstrate the adequacy of the corrective action.
5. the permit may contain a schedule for submittal of the information required in LAC 33:V.520.H.3 and 4 provided the owner or operator obtains written authorization from the administrative authority prior to submittal of the complete permit application.

**Response**

Exide has not identified hazardous constituents with its Groundwater Detection Monitoring Program above historic levels; therefore, this section does not apply.

**§521. Specific Part II Information Requirements for Containers**

Except as otherwise provided in LAC 33:V.2101 owners or operators of facilities that store containers of hazardous waste must provide the following additional information:

- A. a description of the containment system to demonstrate compliance with LAC 33:V.2111; show at least the following:
  1. basic design parameters, dimensions, and materials of construction;

**Response**

***K069/D008 Storage Area***

The K069/D008 storage area has a maximum storage capacity of 544 55-gallon drums (29,920 gallons) calculated as follows:

Area = 25 ft by 70 ft

17 pallets per row x 2 pallets high x 4 drums per pallet = 136 drums per row

4 rows (3 aisles with no more than 1 row between aisles) x 136 drums per row = 544 drums maximum storage capacity.

544 drums x 55 gallons per drum = 29,920 gallons

The K069/D008 storage area has an asphalt and concrete floor and a 3 inch high asphalt berm for containment. The base of the K069/D008 storage area is, from top to bottom, 4 inches of asphalt, 4 inches of concrete, 1.5 inches of asphalt and 6 inches of concrete. Details of the K069/D008 storage area are provided in Figure 11. The drums within the K069/D008 storage area do not contain free liquids or materials containing free liquids. The area is also under a roof to prevent precipitation for entering the area; therefore, the requirement for minimum containment volume does not apply to the K069/D008 storage area.



### ***Truck/Trailer Storage Area***

The Truck/Trailer Storage Area has a maximum storage capacity of 85,000 batteries (85,000 gallons) calculated as follows. The maximum height of pallets and batteries is 8 feet.

Area = 120 ft by 120 ft

36 trailers x 2,361 batteries per trailer = 85,000 batteries

85,000 batteries x 1 gallon per battery = 85,000 gallons

The Truck/Trailer Storage area has an asphalt and concrete floor with a 2.5 foot high asphalt berm for containment. The base of the Truck/Trailer Storage area is, from top to bottom, 3 inches asphalt and 6 inches concrete, with the exception of the dolly pad (12 inches concrete) and a concrete area (6 inches concrete) as shown on Figure 12.

As the Truck/Trailer Storage Area stores batteries which contain free liquids, the containment system (i.e., floor and asphalt perimeter berm) was designed to have sufficient capacity to contain a 12 inch (25-year, 24-hour) rainfall event and 10% of the total battery acid stored. Calculations are provided as follows:

$$\begin{aligned}\text{Available Containment Volume} &= 120 \text{ ft} \times 120 \text{ ft} \times 2.5 \text{ ft} \\ &= 36,000 \text{ cf} \\ &= 269,280 \text{ gal}\end{aligned}$$

$$\text{Stormwater to be stored} = 120 \text{ ft} \times 120 \text{ ft} \times 1 \text{ ft} = 14,400 \text{ cf} = 107,712 \text{ gal}$$

$$\begin{aligned}\text{10\% of total battery acid to be stored} &= 85,000 \text{ gal} \times 0.1 \\ &= 8,500 \text{ gal}\end{aligned}$$

$$\begin{aligned}\text{Total liquid (stormwater and 10\% of acid) to be stored} \\ &= 107,712 \text{ gal} + 8,500 \text{ gal} = 116,212 \text{ gal}\end{aligned}$$

As the containment volume of 269,280 gallons is greater than the total liquid volume to be stored (116,212 gallons), the containment at the Truck/Trailer Storage Area is acceptable.

### ***Whole Battery Storage Area***

The Whole Battery Storage Area has a maximum storage capacity of 121,500 batteries (121,500 gallons) calculated as follows. The maximum height of pallets and batteries is 8 feet.

Area = 75 ft by 160 ft

18 pallets per row x 3 pallets high x 75 batteries per pallet = 4,050 batteries per row

30 rows (15 aisles with no more than 2 rows between aisles) x 4,050 batteries per row = 121,500 batteries

121,500 batteries x 1 gallon per battery = 121,500 gallons.

The Whole Battery Storage Area has an asphalt and concrete floor with a 5-inch high perimeter asphalt berm for containment. The base of the Whole Battery Storage Area is, from top to bottom, 6 inches asphalt and 10 inches of 3,500 psi mesh reinforced concrete as shown on Figure 13.

The Whole Battery Storage Area stores batteries which contain free liquids. The Whole Battery Storage area has a maximum storage capacity of 121,500 batteries (i.e., 121,500 gallons). The containment system (i.e, floor and asphalt perimeter berm) was designed to contain 10% of acid plus 2 inches freeboard. This area is not required to manage a 12 inch rainfall event as the area has a roof and is constructed to prevent run-on. Calculations are provided as follows:

Available containment volume = 75 ft x 160 ft x (5/12) ft  
= 5,000 cf  
= 37,400 gal

Stormwater stored = 0 gal

10% of total battery acid to be stored = 121,500 gal x 0.1 = 12,150 gal

Total liquid to be stored = 12,150 gal

Two inch freeboard = 75 ft x 160 ft x (2/12) ft  
= 2,000 cf  
= 14,960 gal

As the containment volume of 37,400 gallons is greater than the total liquid volume to be stored plus free board (12,150 gallons + 14,960 gallons = 27,110 gallons), the containment at the Whole Battery Storage Area is acceptable.

Concrete and asphalt are sufficiently impervious to contain leaks, spills and accumulated precipitation until the material can be detected and removed.

2. **how the design promotes drainage or how containers are kept from contact with standing liquids in the containment system;**

### **Response**

Exide has designed the drainage system so that any accumulated rain water, process water or wash-down water generated during the operations will be transmitted to the facilities' Waste Water Treatment Unit, where it will be treated as specified in our Water Discharge permit and discharged through Outfall 001. The Containment Building has floor drains that collect wash-down and process water and transmit the water to the Wastewater Treatment Unit. The Slag Stabilization Unit has a water collection drain that transmits stormwater and wash-down to the Wastewater Treatment Unit. The Whole Battery Storage Area is sloped to drain wash-down water into a sump that is pumped to the Wastewater Treatment Unit. The Truck/Trailer Area has a sump that transmits wash-down water and stormwater to the Wastewater Treatment Unit. The K069/D008 Area has a sump that transmits wash-down water and stormwater back to the battery breaking operation for reuse.

As shown on Figure 11, the base of the K069/D008 storage area is sloped to a collection point for ease of removal. The drums are also stored on pallets to prevent contact of the drums with spills. As pallets are 4 inches high, the drums will be maintained above the top of the spill as the berm height is 3 inches. Liquid spills are not anticipated as liquids or materials which contain free liquids are not stored in the K069/D008 storage area and the area is under a roof to prevent precipitation.

As shown on Figure 12, the base of the Truck/Trailer storage area is sloped to collection point for ease of removal. The drums are stored on pallets in truck trailers to provide additional containment and to elevate the drums above accumulated precipitation. As shown on Figure 13, the base of the Whole Battery Storage Area is sloped to a sump for removal and are pumped to the battery breaker unit for neutralization prior to pumping to the wastewater treatment plant. Spent batteries are stored on pallets to elevate the batteries above accumulated liquids.

As shown on Figure 13, the base of the Whole Battery Storage Area is sloped to a collection point for ease of removal. The batteries are stored on pallets a height of 4 inches above the floor. The sloped floor and procedures for removal of liquids within the sump ensure that liquids will not build up to the berm height of 5 inches and contact the batteries.

- 3. capacity of the containment system relative to the number and volume of containers to be stored;**

### **Response**

The design criteria and calculations regarding the capacity of the containment systems are provided in the response to LAC 33.V:521.A.1.

The maximum storage capacity at the Truck/Trailer Storage Area is 85,000 batteries (85,000 gallons). The secondary containment at the Truck/Trailer Storage Area has a capacity of 269,280 gallons, which is sufficient to contain a 12-inch, 25-year, 24-hour storm event and 10% of the battery acid stored.

The Whole Battery Storage Area has a maximum storage capacity of 121,500 batteries (121,500 gallons). The secondary containment at the Whole Battery Storage Area has a capacity of 37,400 gallons, which is sufficient to contain 10% of the battery acid stored. The requirement to contain stormwater does not apply as there is a roof and run-on controls at the Whole Battery Storage Area.

The K069/D008 storage area has a maximum storage capacity of 544 55-gallon drums (29,920 gallons). The drums within the K069/D008 storage area do not contain free liquids or materials containing free liquids. The area is also under a roof to prevent precipitation for entering the area; therefore, the requirement for minimum containment volume does not apply to the K069/D008 storage area.

Desulfurized battery paste is stored in Area 2 of the Containment Building. The paste is a moist red-brown, high density solid material with a moisture content less than 5%. The material may contain free liquids. Any free liquids drain to a sump at Area 2 and are pumped to the Battery Breaker Unit for processing. Paste is not stored at the Container Storage Area.

#### **4. provisions for preventing or managing run-on;**

### **Response**

Run-on into the containment system of the K069/D008 storage area, Truck/Trailer storage area and Whole Battery Storage Area is prevented by the asphalt perimeter berm and the slope of the floor systems.

#### **5. how accumulated liquids can be analyzed and removed to prevent overflow;**

### **Response**

Any wash-down water, process water and stormwater that is generated by the facility is transmitted to the Wastewater Treatment Unit. The water is treated and discharged through process water

Outfall 001. Water samples are collected from the outfall and analyzed as specified in Exide's Water Discharge permit. The sample results are sent to LDEQ in the Monthly Discharge Monitoring Reports.

Exide receives whole lead acid batteries at the facility for recycling. The batteries are stored at the container storage areas. Whole lead acid batteries do contain free liquids. The batteries are broken and separated into three waste streams (lead, liquid, and plastic) as part of the recycling process. The majority of the liquid is immediately separated out and sent to the on-site treatment plant. The plastic is shipped off-site for recycling. The lead, including grids, posts and paste, is sent to the Containment Building. The paste is a moist red-brown high density solid material which may contain free liquid. Any liquid from the paste is drained to a sump and pumped to the Battery Breaker Unit for processing or to the wastewater treatment system for treatment. The sump is inspected as indicated in the Inspection Plan.

**B. for storage areas that store containers holding wastes that do not contain free liquids, a demonstration of compliance with LAC 33:V.2111.C including:**

- 1. test procedures and results or other documentation or information to show that the wastes do not contain free liquids; and**

Exide does not store materials with free liquids in the K069/D008 Storage Area. This is confirmed by inspection of the materials at delivery. The wastes stored in drums at the K069/D008 storage area do not contain free liquids or material containing free liquids and the area has a roof to prevent precipitation; therefore a containment system is not required.

- 2. a description of how the storage area is designed or operated to drain and remove liquids or how containers are kept from contact with standing liquids;**

**Response**

The K069/D008 Storage Area is sloped to drain to a collection point as shown on Figure 11. The drums at the K069/D008 storage area are stored on pallets to be elevated above accumulated liquid.

**C. sketches, drawings, or data demonstrating compliance with LAC 33:V.2113 (location of buffer zone and containers holding ignitable or reactive wastes) and LAC 33:V.2115.C (location of incompatible wastes), where applicable;**

**Response**

This section is not applicable since the waste stored and generated by the Baton Rouge smelter is not ignitable or reactive.

- D. where incompatible wastes are stored or otherwise managed in containers, a description of the procedures used to ensure compliance with LAC 33:V.2107.A-C, and 1517.B-D; and

**Response**

Exide does not receive or generate incompatible wastes.

- E. information on air emission control equipment as required in LAC 33:V.526.

**Response**

All air emissions are regulated by Exide's Air Permit 0840-00004-00. All emission points are vented to control devices to filter particulate and lead emissions. The control devices, fabric filter baghouse, are tested regularly to insure compliance. A schematic of the air handling system is provided in Figure 10. Plant roadways are swept and washed once per shift. Feed piles (lead-bearing material stored in piles prior to being recycled in the furnaces) are treated with water for dust suppression, as needed in accordance with the Dust Suppression Operational Procedure in Appendix 12. Care is taken in the dust suppression to avoid generating free liquids.

**§523. Specific Part II Information Requirements for Tanks**

Except as otherwise provided in LAC 33:V.1901, owners and operators of facilities that use tanks to store or treat hazardous waste must provide the following additional information:

- A. a written assessment that is reviewed and certified by an independent, qualified registered professional engineer as to the structural integrity and suitability for handling hazardous waste for each tank system, as required under LAC 33:V.1903 and 1905;
- B. dimensions and capacity of each tank;
- C. descriptions of feed systems, safety cutoff, bypass systems, and pressure controls (e.g., vents);
- D. a diagram of piping, instrumentation, and process flow for each tank system;
- E. a description of materials and equipment used to provide external corrosion protection, as required under LAC 33:V.1905.A.3.b;

**RESPONSE  
ATTACHMENT 11**

# **CHAPTER 11**

## **GENERATORS**



## **§1119. Personnel Training**

**All generators shall institute a personnel training program as specified in LAC 33:V.1515. The training program should cover all portions of the facility that handle hazardous wastes.**

### **Response**

The Training Manual is included as Appendix 13. The types of training include medical surveillance, lockout/tagout, confined space entry, hearing conservation, respiratory protection, powered industrial truck safety, hazard communication, HAZWOPER, the emergency/contingency plan, environmental regulations, spill response, work practice training, DOT Hazardous materials training, sexual harassment, blood borne pathogens, heat stress, fire extinguisher use, incipient fire control, fall protection, slip trip and fall hazard avoidance, proper lifting techniques and back protection as well as operation specific SOPs. The Training Manual also includes the schedule and recordkeeping. The Training Manual will be updated as needed to maintain safety and environmental compliance. All plan revisions will be maintained on-site.

## **§1121. Spills**

**Any spilled material or material trapped in sumps that is a hazardous waste or that will be disposed of as a hazardous waste must be cleaned up in a timely manner.**

### **Response**

The requirements of the SPCC Plan have been incorporated into the Contingency and Emergency Response Plan (Appendix 6). The plan includes the facility's preventative measures to prevent spills and procedures for taking corrective actions and/or countermeasures when a spill occurs. Materials trapped in sumps that is a hazardous waste will be cleaned up in a timely manner. The material will be transferred to the furnace for reclaim or containerized and stored for off-site disposal at a permitted facility.

## **§1123. Imports of Foreign Hazardous Waste**

- A. Any person who imports hazardous waste from a foreign country into the state of Louisiana must comply with this Chapter and the special requirements of LAC 33:V.1123.**
- B. When importing hazardous waste from a foreign country into the state of Louisiana, a person must meet all the requirements of LAC 33:V.1107 for the manifest except that:**

**RESPONSE  
ATTACHMENT 15**

## **CHAPTER 15**

# **TREATMENT, STORAGE, AND DISPOSAL FACILITIES**

**Title 33**  
**ENVIRONMENTAL QUALITY**  
**Part V. Hazardous Waste and Hazardous Materials**

**Chapter 15. Treatment, Storage, and Disposal Facilities**

**§1501. Applicability**

- A. The regulations in this Chapter apply to owners and operators of all hazardous waste facilities, except as provided in LAC 33:V.1501.C. LAC 33:V.1503.B.3 applies only to facilities subject to regulations under LAC 33:V. Chapters 19, 21, 23, 25, 27, 29, 31, or 32.**

**Response**

Exide stores lead-bearing materials for recycling within three permitted hazardous waste storage areas (the Truck/Trailer Storage Area, the K069/D008 Storage Area and the Whole Battery Storage Area). Exide also operates a Containment Building currently on interim status and a permitted hazardous waste treatment unit (the Slag Stabilization Unit). Additional details regarding the storage areas, including calculations, are provided in Chapter 21. A permit modification was previously submitted to include the Containment Building as required by Appendix 1. Approval of the modification has not yet been received as Exide is responding to comments received from LDEQ on March 18, 2003. Exide is therefore subject to the regulations in Chapter 15 of the LHWR (Louisiana Hazardous Waste Regulations).

The Containment Building (currently in interim status) is used to hold lead-bearing raw materials prior to recycling. The building has an engineered capacity of 3,333 tons of blast furnace slag that is stored prior to on-site stabilization and disposal. Additionally, the building has the capability to hold 12,080 tons of lead material for recycling, including battery plates, lead oxide paste, reverberatory furnace slag, lead dross, and purchased scrap. Additional information, including calculations, regarding the Containment Building is provided in Chapter 18.

The Slag Stabilization Unit is a hazardous waste treatment unit that treats blast furnace slag by mixing it with Portland cement and sodium silicate. The Slag is crushed and screened to 3/8 inch maximum and is fed into a pugmill. The pugmill was manufactured by Cedar Rapids, Model No. 400. Portland cement, sodium silicate and water are added in fixed volumes to the Slag in the pugmill and are mixed to form a thick pasty mixture which cures to a soil-like solid. The use of a pugmill for mixing allows for control of reagent addition and uniform mixing to create a consistent stabilized product. The treated product is dumped into a dump truck for

transportation to the on-site disposal facility. Foaming and misting do not occur during the treatment process. A water mist is used for dust suppression. The sodium silicate is delivered in 300 gallon totes and is stored in a tank and diluted with water. Portland cement is stored in a silo above the pugmill. Treatment is conducted on a batch basis. The Slag Stabilization unit is located under a roof, and is bermed with drainage control in the form of floor sumps that transmit wash-down water and any accumulated liquids to the plant's wastewater treatment unit. Materials containing free-liquid are not processed in the Slag Stabilization Unit. Figure 16 shows the berms and grading of the Slag Stabilization unit.

The Slag Stabilization Unit has a maximum capacity of 144.4 tons. Calculations from the Closure Cost Estimate (Appendix 8) are as follows:

$$\begin{aligned} 20 \text{ ft} \times 15 \text{ ft} \times 10 \text{ ft} &= 3,000 \text{ cf} = 111.1 \text{ cy} \\ 111.1 \text{ cy} \times 1.3 \text{ tons/cy} &= 144.4 \text{ ton} \end{aligned}$$

As shown on Figure 16, the floor system is, from top to bottom, 8 inches of concrete, 4 inches of asphalt and 6 inches of concrete. Calculations for floor strength assuming the maximum load on the floor are as follows:

$$\begin{aligned} \text{Floor area: } 20 \text{ ft} \times 15 \text{ ft} &= 300 \text{ sf} \times 144 = 43,200 \text{ si} \\ \text{Maximum Waste Weight} &= 144.4 \text{ tons} = 288,800 \text{ lbs} \\ \text{Weight of front end loader} &= 24,000 \text{ lbs} \\ \text{Maximum weight on floor} &= 288,800 \text{ lbs} + 24,000 \text{ lbs} = 312,800 \text{ lbs} \\ \text{Maximum load on floor} &= 312,800 \text{ lbs} / 43,200 \text{ si} = 7.24 \text{ psi} \end{aligned}$$

In order to support operations, the concrete strength at the Slag Stabilization Unit would need to be a minimum of 7.24 psi. As concrete has a typical strength of 3,000 to 4,000 psi, the concrete floor is capable of supporting the anticipated loads when properly reinforced and constructed on an adequately prepared subgrade.

Design calculations for the Slag Stabilization Unit walls and information regarding the size and quantity of reinforcing steel could not be located as part of the Part B Permit renewal process. Qualitatively it is obvious that the reinforced concrete walls for the structure provide adequate strength based on the observation that the walls have been functioning since their construction over 10 years ago. The ultimate limit state of the Slag Stabilization Unit walls would be failure by flexure (moment) and shear. No movement or cracking has been observed that would suggest either failure mechanism is occurring.

To substantiate the qualitative observation that the strength of the walls is adequate, a simplified quantitative evaluation for shear stress was performed. For evaluation purposes, the exterior walls are considered as

unit lengths with a fixed end at the ground surface and unsupported at the top of the wall, relying on the inherent strength of the walls to resist shear from the applied loads. As shown in the attached calculations, shear forces imposed by the lateral loads from the materials contained in the building are easily handled (F.S.= 2.4) by the resistance developed in the reinforced wall. Calculations are provided in Appendix 22.

For moment, the building relies on a combination of the inherent strength of the reinforced wall and frame action provided by the building columns. Approximately half of the stress is accommodated by the wall strength with the remainder of the stress being transferred to the building frame. Unlike shear, a simplified quantitative evaluation for flexure could not be completed utilizing the information available, although as stated earlier, no visual observations were made that indicate that the building has not been adequate for the services loads experienced during the last 10 years of operation.

- B. Except as specifically authorized by the terms and conditions of a permit issued under these rules and regulations, the construction and operation of a facility to treat, store, or dispose of hazardous wastes in violation of the standards established by this Section shall be a violation of the Act enforceable pursuant to LAC 33:V.107 of these regulations and R.S. 30:1073.**

**Response**

Exide acknowledges and understands this citation and will comply.

- C. The requirements of this Chapter do not apply to:**
- 1. the owner or operator of a facility permitted, licensed, or registered to manage municipal or industrial solid waste, if the only hazardous waste the facility treats, stores, or disposes of is excluded from regulation by LAC 33:V. Subpart 1;**
  - 2. the owner or operator of a facility which treats or stores material which would otherwise be a hazardous waste which is being beneficially used or reused, legitimately recycled, or reclaimed as defined in LAC 33:V.Chapter 41 (except to the extent they are referred to in LAC 33:V.Chapter 40 or Sections 4139, 4143, or 4145;**
  - 3. reserved;**
  - 4. a farmer disposing of waste pesticides from his own use as provided in LAC 33:V.1101.D;**

5. the owner or operator of a totally enclosed treatment facility (see LAC 33:V.109);
6. the owner or operator of an elementary neutralization unit or wastewater treatment unit (see LAC 33:V.109) provided that if the owner or operator is diluting hazardous ignitable (D001) wastes (other than the D001 High TOC Subcategory defined in LAC 33:V.Chapter 22.Table 2, Treatment Standards for Hazardous Wastes) or reactive (D003) waste to remove the characteristic before land disposal, the owner/operator must comply with the requirements set out in LAC 33:V.1517.B;
7.
  - a. except as provided in Subsection C.7.b of this Section, a person engaged in treatment or containment activities during immediate response to any of the following situations:
    - i. a discharge of a hazardous waste;
    - ii. an imminent and substantial threat of a discharge of hazardous waste;
    - iii. a discharge of a material that, when discharged, becomes a hazardous waste; or
    - iv. an immediate threat to human health, public safety, property, or the environment, from the known or suspected presence of military munitions, other explosive material, or an explosive device, as determined by an explosive or munitions emergency response specialist as defined in LAC 33:V.109;
  - b. an owner or operator of a facility otherwise regulated by this Chapter must comply with all applicable requirements of LAC 33:V.1511 and 1513;
  - c. any person who is covered by Subsection C.7.a of this Section and who continues or initiates hazardous waste treatment or containment activities after the immediate response is over is subject to all applicable requirements of this Chapter and 40 CFR 122-124 for those activities; and
  - d. in the case of an explosives or munitions emergency response, if a federal, state, tribal, or local official acting

within the scope of his or her official responsibilities or an explosives or munitions emergency response specialist determines that immediate removal of the material or waste is necessary to protect human health or the environment, that official or specialist may authorize the removal of the material or waste by transporters who do not have EPA identification numbers and without the preparation of a manifest. In the case of emergencies involving military munitions, the responding military emergency response specialist's organizational unit must retain records for three years identifying the dates of the response, the responsible persons responding, the type and description of material addressed, and its disposition;

8. a transporter storing manifested shipments of hazardous waste in containers meeting the requirements applicable to the regulations of the Department of Public Safety on packaging, at a transfer facility for a period of 10 days or less, if so approved by the administrative authority;
9. the addition of absorbent material to waste in a container (see LAC 33:V.109), or the addition of waste to absorbent material in a container, provided that these actions occur at the time waste is first placed in the container and LAC 33:V.1517.B, 2103, and 2105 are complied with;
10. a generator accumulating waste on-site in compliance with LAC 33:V.1109.E;
11. universal waste handlers and universal waste transporters (as defined in LAC 33:V.3813) handling the wastes listed below. These handlers are subject to regulation under LAC 33:V.Chapter 38, when handling the below listed universal wastes:
  - a. batteries as described in LAC 33:V.3803;
  - b. pesticides as described in LAC 33:V.3805;
  - c. thermostats as described in LAC 33:V.3807;
  - d. lamps as described in LAC 33:V.3809; and
  - e. antifreeze as described in LAC 33:V.3811; or



**Response**

Exide acknowledges these provisions for applicability and will comply. However, in accordance with LAC 33:V.4145.B, owners or operators of facilities that store lead acid batteries prior to reclamation are subject to the provisions of this chapter.

12. LAC 33:V.5309 identifies when the requirements of this Chapter apply to the storage of military munitions classified as solid waste under LAC 33:V.5303. The treatment and disposal of hazardous waste military munitions are subject to the applicable permitting, procedural, and technical standards in LAC 33:V.Subpart 1.

**Response**

Exide acknowledges, understands and will comply with this provision; however, Exide does not store military munitions.

- D. The requirements of this Chapter apply to owners or operators of all facilities which treat, store, or dispose of hazardous wastes referred to in LAC 33:V.Chapter 22.

**Response**

Exide acknowledges, understands and will comply with this provision.

- E. The requirements of this Chapter apply to a person disposing of hazardous waste by means of ocean disposal subject to a permit issued under the Marine Protection, Research, and Sanctuaries Act only to the extent they are included in a RCRA permit by rule granted to such a person under LAC 33:V.305.D.

**Response**

Exide acknowledges, understands and will comply with this provision; however, Exide does not conduct ocean disposal.

- F. The requirements of this Chapter apply to a person disposing of hazardous waste by means of underground injection subject to a permit issued under an Underground Injection Control (UIC) program approved or promulgated under the Safe Drinking Water Act only to the extent they are required by 40 CFR 144.14.

**Response**

Exide acknowledges, understands and will comply with this provision; however, Exide does not conduct underground injection.

- G. The requirements of this Chapter apply to the owner or operator of a POTW which treats, stores, or disposes of hazardous waste only to the extent they are included in a RCRA permit by rule granted to such a person under LAC 33:V.305.D.

**Response**

Exide acknowledges, understands and will comply with this provision; however, Exide does not own or operate a POTW.

- H. The requirements of LAC 33:V.1105, 1503, 1504, 1507, 1509, 1511, 1513, 1515, 1517, 1519, and 3322 do not apply to remediation waste management sites. (However, some remediation waste management sites may be a part of a facility that is subject to a traditional RCRA permit because the facility is also treating, storing, or disposing of hazardous wastes that are not remediation wastes. In these cases, LAC 33:V.1509, 1511, 1513, and 3322 do apply to the facility subject to the traditional RCRA permit.) Instead of the requirements of LAC 33:V.1509, 1511, and 1513, owners or operators of remediation waste management sites must:
1. obtain an EPA identification number by applying to the administrative authority using the department's Form HW - 1;
  2. obtain a detailed chemical and physical analysis of a representative sample of the hazardous remediation wastes to be managed at the site. At a minimum, the analysis must contain all of the information which must be known to treat, store, or dispose of the waste according to LAC 33:V.Chapters 9 - 11, 15 - 29, and 31-37, and must be kept accurate and up to date;
  3. prevent people who are unaware of the danger from entering, and minimize the possibility for unauthorized people or livestock to enter onto the active portion of the remediation waste management site, unless the owner or operator can demonstrate to the administrative authority that:
    - a. physical contact with the waste, structures, or equipment within the active portion of the remediation waste management site will not injure people or livestock who may enter the active

portion of the remediation waste management site; and

- b. disturbance of the waste or equipment by people or livestock who enter onto the active portion of the remediation waste management site will not cause a violation of the requirements of this Section;
- 4. inspect the remediation waste management site for malfunctions, deterioration, operator errors, and discharges that may be causing, or may lead to, a release of hazardous waste constituents to the environment, or a threat to human health. The owner or operator must conduct these inspections often enough to identify problems in time to correct them before they harm human health or the environment, and must remedy the problem before it leads to a human health or environmental hazard. Where a hazard is imminent or has already occurred, the owner/operator must take remedial action immediately;
- 5. provide personnel with classroom or on-the-job training on how to perform their duties in a way that ensures the remediation waste management site complies with the requirements of LAC 33:V.Chapters 9 - 11, 15- 29, and 31- 37, and on how to respond effectively to emergencies;
- 6. take precautions to prevent accidental ignition or reaction of ignitable or reactive waste, and prevent threats to human health and the environment from ignitable, reactive, and incompatible waste;
- 7. for remediation waste management sites subject to regulation under LAC 33:V.Chapters 19, 21, 23, 25, 27, 29, 31, and 32, the owner/operator must design, construct, operate, and maintain a unit within a 100-year floodplain to prevent washout of any hazardous waste by a 100-year flood, unless the owner/operator can meet the demonstration of LAC 33:V.1503.B;
- 8. not place any non-containerized or bulk liquid hazardous waste in any salt dome formation, salt bed formation, underground mine, or cave;

9. develop and maintain a construction quality assurance program for all surface impoundments, waste piles, and landfill units that are required to comply with LAC 33:V.2303.C and D, 2503.L and M, and 2903.J and K at the remediation waste management site, according to the requirements of LAC 33:V.1504;
10. develop and maintain procedures to prevent accidents and a contingency and emergency plan to control accidents that occur. These procedures must address proper design, construction, maintenance, and operation of remediation waste management units at the site. The goal of the plan must be to minimize the possibility of, and the hazards from, a fire, explosion, or any unplanned sudden or nonsudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water that could threaten human health or the environment. The plan must explain specifically how to treat, store, and dispose of the hazardous remediation waste in question, and must be implemented immediately whenever a fire, explosion, or release of hazardous waste or hazardous waste constituents which could threaten human health or the environment occurs;
11. designate at least one employee, either on the facility premises or on call (that is, available to respond to an emergency by reaching the facility quickly), to coordinate all emergency response measures. This emergency coordinator must be thoroughly familiar with all aspects of the facility's contingency plan, all operations and activities at the facility, the location and characteristics of waste handled, the location of all records within the facility, and the facility layout. In addition, this person must have the authority to commit the resources needed to carry out the contingency plan;
12. develop, maintain, and implement a plan to meet the requirements in Subsection H.2 - 6 and 9 - 10 of this Section; and
13. maintain records documenting compliance with Subsection H.1 -12 of this Section.

### **Response**

Exide acknowledges, understands and will comply with these provisions; however, Exide is not a remediation waste management site and therefore this section does not apply.

## **§1503. Site Requirements**

### **A. Geology**

- 1. Topographic Relief. The site should not have any abrupt topographic changes or means should be provided to guard against slides, slumping, or erosion.**

### **Response**

Exide is located in the northwestern portion of East Baton Rouge Parish. The site topography is relatively flat with a slope toward the Baton Rouge Bayou on the northwest side of the property. The active portion of the site does not slope toward the bayou. The elevation of the active portion of the site is between 85- and 75-feet above mean sea level (MSL). The western and northern sections of the property slope down to an elevation of 35 ft MSL. A topographic map of the facility is provided in Figure 5.

- 2. Soils. The area should be covered with natural stable soils of low permeability or a means should be provided, acceptable to administrative authority, which provide a barrier to penetration of surface spills or accumulations of hazardous wastes into a subsurface strata which would have a potential effect on a fresh-water aquifer.**

### **Response**

The Baton Rouge smelter is underlain by natural soils of low permeability with some interbedded units of clayey sands, sandy clays, and sands. During recent soil borings associated with the active solid waste landfill west of the facility, the top of the uppermost aquifer (first competent permeable zone) was encountered at elevations of approximately 28 to 32 feet MSL. The base of the uppermost aquifer was encountered at elevations of approximately 20 to 25 feet MSL. The upper aquifer is assumed to be laterally continuous throughout the facility. Additional information regarding site geology is provided in Appendix 10. The three permitted container storage areas and the permitted treatment unit are all underlain with impervious concrete and asphalt layers with proper containment to prevent any spills from penetrating the subsurface strata. The Containment Building has an existing floor of concrete and asphalt to prevent the penetration of hazardous waste

materials into the subsurface strata. A portion of the floor was upgraded to include a HDPE liner and acid brick in November 2003. The certification document for the floor upgrade is provided in Appendix 11C. This upgrade will be more protective to the environment. The floors of all hazardous waste units are inspected at least weekly and the records are kept onsite. If any problems with the floors are encountered, they will be corrected immediately.

The protective measures and Containment Building design are discussed in detail in Chapter 5 and Chapter 18.

3. **Seismic Conditions. Portions of new facilities where treatment, storage, or disposal of hazardous waste will be conducted must not be located within 61 meters (200 feet) of a fault which has had displacement in Holocene time.**

**Response**

According to published data ("Fault and Salt Map of South Louisiana", 1982, by R.E. Wallace), faults that have had displacement in the Holocene time are not located within 200 feet of the Baton Rouge smelter. A map showing the locations of recorded faults is included as Figure 8.

**B. Hydrology**

1. **General Requirement. Sites utilized shall be isolated by means of natural or created boundaries from adjoining land and from subsurface and surface waters.**

**Response**

The Containment Building, Whole Battery Storage Area, K069/D008 Storage Area and Slag Stabilization Area are completely enclosed in order to isolate them from the adjoining land and subsurface/surface waters. Runoff from these buildings is prevented by inward-sloping floors and curbing systems. In addition, areas that have free liquids utilize a secondary containment system and/or roofing so that any liquids collected will be contained and subsequently discharged to the wastewater treatment (WWT) system. The containment building and all other areas managed in accordance with the LHWRs are located on concrete and/or asphalt floors to prevent subsurface penetration of liquid.

To manage stormwater and prevent runoff, the facility is graded for drainage to the Wastewater Drainage and Collection System shown on Figure 5 (Topographic Map). Collected water is sent to the

facility WWT system. The Truck/Trailer Storage Area also has a perimeter berm to prevent runoff and is graded to drain to the Wastewater Drainage and Collection System.

2. **Drainage.** The site must have the capability to control and/or contain run-off from the maximum rainfall in 24 hours from a 25-year storm (when maximum rain fall records are not available, the design standard shall be 12 inches below 31 degrees North latitude and nine inches above 31 degrees North latitude) and must have the capability to divert run-on from adjoining land (outside limits of hazardous waste site or if part of an industrial complex, outside limits of company property) from such a storm from the site (surface and subsurface).

#### **Response**

To prevent runoff, the ground surface of the active areas of the facility is graded to drain inward with an asphalt swale. Grading and the swale directs stormwater to the Wastewater Drainage and Collection System which was designed to manage a twenty-four hour, twenty-five year storm event. Run-on from the north and west is prevented by a 40-ft. difference in topographic relief that falls from a nominal elevation 80-ft. MSL onsite to a nominal elevation below 39 ft MSL at Baton Rouge Bayou. The NPC Services, Inc access road that represents a high point between the Exide facility and the adjacent Great Lakes Carbon facility controls drainage along the eastern boundary of the Site. Precipitation falling on the access road is shed either to the east or west as roughly defined by the centerline of the road. The edge of the access road defines the eastern property boundary for the Exide facility. Run-on from areas south of the Site is prevented by a swale that drains from the main gate along the property boundary towards Baton Rouge Bayou. The swale intercepts surface water draining towards the Site and redirects it from away from the facility. The limited amount of surface water run-on and effectiveness of the surface controls (i.e., swales) preclude the need for subsurface controls such as pipes or culverts.

Exide's stormwater management system, and run-on and run-off controls have successfully managed Tropical Storm Isidore and Hurricane Andrew, Lili, Katrina and Rita.

#### **3. Floodplains**

- a. A facility located in a 100-year floodplain must be designed, constructed, operated, and maintained to

**prevent washout of any hazardous waste by a 100-year flood unless the owner or operator can demonstrate to the administrative authority that:**

- i. procedures are in effect which will cause the waste to be removed safely, before flood waters can reach the facility, to a location where the wastes will not be vulnerable to floodwaters; or**

**Response**

Based on the most recent Flood Insurance Rate Map (Figure 9, May 17, 1993), Exide is an existing facility located in Zone X, an area of minimal flooding. The developed site is above the 100-year flood plain. The elevation of the active portion of the site is between 85- and 75-feet above mean sea level (MSL). Site records indicate that there have been no flooding incidents in the active portion of the facility, including during major storm events such as Tropical Storm Isidore and Hurricane Lili in 2002.

- ii. for existing surface impoundments, waste piles, land treatment units, landfills, and miscellaneous units, no adverse effects on human health or the environment will result if washout occurs, considering:**
  - (a) the volume and physical and chemical characteristics of the waste in the facility;**
  - (b) the concentrations of hazardous constituents that would potentially affect surface waters as a result of washout;**
  - (c) the impact of such concentrations on the current or potential uses of and water quality standards established for the affected surface waters; and**
  - (d) the impact of hazardous constituents on the sediments of affected surface waters or the soils of the 100-year floodplain that could result from washout.**



### **Response**

Exide does not have any existing surface impoundments, waste piles, land treatment units, active hazardous waste landfills, or miscellaneous units. The two closed hazardous waste piles are permitted under a separate permit and do not have the potential to release contaminants to surrounding water ways.

## **4. Hurricane-Prone-Areas**

**Sites located in an area which is historically subject to hurricanes shall be protected from the entry of water by natural or created barriers certified by a professional engineer.**

### **Response**

Although the Exide facility is located in an area subject to hurricanes, they are infrequent and have resulted in minimal damage. Exide facilities have been designed and constructed to withstand storms and hurricanes. The land between the site location and the Louisiana Gulf Coast provides a natural barrier from the full impact of a hurricane. This distance provides adequate warning to shut down the site and prepare for the storm.

The facility is elevated approximately 40 feet above Baton Rouge Bayou and the Mississippi River. The elevation of the Bayou is approximately 40 ft. MSL. The nominal elevation of the operating areas of the facility is elevation 80 ft. MSL. The difference in elevation provides a natural barrier to protect from entry of water. In addition, the facility is located outside of the limits of the 100 year flood plain as shown on Figure 9. A certification statement indicating that the natural barrier provides protection from entry of water is provided in Appendix 29.

In the event of a hurricane threat to the surrounding area, Exide has a RCRA Contingency Plan and Emergency Response Plan that details hurricane response and preparedness. This plan is included as Appendix 6. The Plan includes assignment of duties to personnel, emergency response procedures, types of emergency situations, procedures for plan or unit shutdowns, the alarm system and types and locations of emergency equipment. A hurricane isoline map is presented in Appendix 19.

**5. Conformity with Existing Restrictions and Permits**

Sites located in floodways or wetlands under control of the U.S. Army Corps of Engineers and/or the Coastal Zone Management Office must apply for applicable permits. However, to avoid unnecessarily long licensing periods, the department may accept and process the application with its final approval dependent upon a similar approval. Final department action on such a state permit will be taken after final action on wetlands and coastal zone permits.

**Response**

The site is not under the control of the U.S. Army Corps of Engineers or the Coastal Zone Management Office nor are any coastal zone or wetlands permits required for operation of the treatment and storage units.

**6. Areas of Critical Environmental Concern. Sites located in, or adjacent to, swamps, marshes, floodplains, estuaries, designated wildlife hatchery areas, habitats of endangered species, and similar critical environmental areas shall be isolated from such areas by effective barriers which eliminate possible adverse impacts on such areas due to the operation of the facility.**

**Response**

Exide is not located in or adjacent to marshes, floodplains, estuaries, designated wildlife hatchery areas, or other environmentally sensitive areas. Documentation from July 2005, the 1993 Hazardous Waste Permit Application and the 1997 Solid Waste Landfill Permit Application are provided in Appendix 21.

Information has been received that the pallid sturgeon and its habitat in the Mississippi River may be affected by the facility. However, impacts are due to the loss of habitat caused by construction of dams that have modified flows, reduced turbidity, and lowered water temperatures. Exide does not plan to construct any dams, therefore the proposed permit renewal should not impact the pallid sturgeon. Exide will continue to avoid any degradation of the water quality in the Mississippi River. No other impacts to rare, threatened or endangered species or critical habitats were identified.

Devil's Swamp, the area between Baton Rouge Bayou and the Mississippi River is southwest of the facility but is separated from

the treatment and storage areas by containment berms and concrete and asphalt perimeter stormwater collection ditches.

7. **Salt Dome Formations, Salt Bed Formations, Underground Mines, and Caves.** The placement of any noncontainerized or bulk liquid hazardous waste in any salt dome formation, salt bed formation, underground mine or cave is prohibited.

**Response**

Exide acknowledges, understands and will comply with this provision; however, Exide does not place hazardous waste in any salt formation, underground mine or cave.

**C. Facilities**

1. **Transportation.** Access to sites by surface and water transportation modes shall be by roads and waterways with the capacity to accept the demands created by the facility and designed to avoid, to the extent practical, congestion, sharp turns, obstructions, or other hazards which are conducive to accidents.

**Response**

The Exide facility is located in East Baton Rouge Parish Road at the west end of Brooklawn Drive which provides access from Highway 61. The roadway has been used since the facility was constructed in 1969 with little or no problems with congestion or obstructions. A diagram of on-site traffic patterns is provided as Figure 17.

2. **Services.** Sites shall have convenient access to required services, including: utilities, medical care, police, fire protection, and similar services, or provide these services internally in a manner acceptable to the administrative authority.

**Response**

Exide acknowledges, understands and will comply with this provision. Exide has provided for access to utilities, medical care, police, fire protection and other required services. Utilities are provided to maintain daily operations. Emergency response services including medical care, police and fire protection are detailed in Appendix 6, RCRA Contingency Plan and Emergency Response Plan. The Plan includes assignment of duties to personnel, emergency response procedures, types of emergency

situations, procedures for plan or unit shutdowns, the alarm system and types and locations of emergency equipment.

### **3. Buffer Zone**

- a. **General Requirement.** Sites shall be shielded from adjoining noncompatible land uses by space, natural separation, or other means acceptable to the administrative authority.
- b. **Minimum Requirements.** In no event shall the buffer be less than that stated for the following sites:
  - i. **Sites zoned industrially—Sufficient space for security and drainage control facilities; or**
  - ii. **All other locations—200 feet between any facility (treatment pond, incinerator, tank, etc.) and property line unless a proper buffer is installed which is acceptable to the administrative authority (see LAC 33:V.2113 for container requirements).**

#### **Response**

Exide is zoned industrial and provides sufficient space for security and drainage control between the treatment and storage areas and the adjacent property. The site is fenced to control access and has 24-hour security.

### **§1504. Construction Quality Assurance Program**

#### **A. CQA Program**

- 1. **A construction quality assurance (CQA) program is required for all surface impoundment, waste pile, and landfill units that are required to comply with LAC 33:V.2903.J and K, 2303.C and D, and 2503.L and M. The program must ensure that the constructed units meet or exceed all design criteria and specifications in the permit. The program must be developed and implemented under the direction of a CQA officer who is a registered professional engineer.**

#### **Response**

Exide acknowledges, understands and will comply with this provision; however, Exide does not require the construction of

soil liner will meet the hydraulic conductivity requirements of LAC 33:V.2303.C.1.b, 2503.L.1.b, and 2903.J.1.b in the field.

**Response**

Exide acknowledges, understands and will comply with this provision; however, Exide does not require the construction of surface impoundments, waste piles or landfill units in this permit renewal.

- D. **Certification.** Waste shall not be received in a unit subject to LAC 33:V.1504 until the owner or operator has submitted to the administrative authority by certified mail or hand delivery a certification signed by the CQA officer that the approved CQA plan has been successfully carried out, that the unit meets the requirements of LAC 33:V.2903.J or K, 2303.C or D, or 2503.L or M, and the procedure in LAC 33:V.309.L.3.b has been completed. Documentation supporting the CQA officer's certification must be furnished to the administrative authority upon request.

**Response**

Exide acknowledges, understands and will comply with this provision; however, Exide does not require the construction of surface impoundments, waste piles or landfill units in this permit renewal.

**§1505. Discharges from the Site**

- A. **General Requirements.** All point-source discharges must be controlled and reported as follows:
1. water discharges, if any, must be in conformity with effluent limitations established by the Clean Water Act operating under an NPDES permit and reported as required by that permit. The NPDES Permit must be applied for prior to the issuance of a hazardous waste permit; or

**Response**

Discharges from the Baton Rouge smelter are regulated by NPDES/LPDES permit LA0004464, dated April 1, 2001. Discharges from the Baton Rouge smelter are maintained within the effluent limitations specified in the NPDES permit. Monthly DMR reports are submitted as required by the Clean Water Act and the NPDES permit.

2. air emissions, if any, must be in conformity with air limitations of the Clean Air Act administered by the Air Quality Division of the department, operating under an Air Quality Permit as

required, and reported as required by that permit. The air permit must be applied for prior to the issuance of a hazardous waste permit.

**Response**

Exide operates under state operating permit 0840-00004-00, dated July 12, 1995 for all of its emissions. Exide emissions are in conformity with air limitations of the Clean Air Act and the operating permit. A Title V Air Permit Application was submitted to LDEQ in 1996 and updated in July 2002. A schematic of the air handling system at the Containment Building is provided as Figure 10.

- B. Surface. Offsite shipments of any hazardous waste material, containers, packaging, or similar material must be reported on a manifest and must be delivered to a permitted facility.**

**Response**

All offsite shipments of hazardous waste material, containers, packaging, or similar material will be reported on a manifest and delivered to a permitted facility.

**C. Spills**

- 1. Any spill of hazardous waste which could possibly endanger health or adversely affect the environment off-site shall be reported to the department immediately as provided in the "Notification Regulations and Procedures for Unauthorized Discharges and Spills." (See LAC 33:I.Chapter 39).**

**Response**

Exide acknowledges, understands and will comply with this citation. Any spills shall be reported in accordance with LAC 33:I.Chapter 39, "Notification Regulations and Procedures for Unauthorized Discharges and Spills." The requirements of a Spill Prevention, Control and Counter Measures Plan, which outlines procedures that will be followed in the event of a spill, have been incorporated into the RCRA Contingency Plan and Emergency Response Plan (Appendix 6). Depending on the nature of the spill or emergency, the Environmental Manager will notify the appropriate state and local agencies including EPA, LDEQ, US Coast Guard, National Response Center, the fire department, State Police, Sheriff's office and/or HAZMATT/TESS. In the event of a spill of any material on which maintenance of an MSDS is required and the spill exceeds the reportable quantity, or if the spill causes emergency conditions (irrespective of quantity), the Environmental Manager will notify the

Department of Public Safety hotline within one hour after learning of the discharge.

2. **If a spill occurs on the site of a generator or TSD facility, and if that spill could endanger the public health or affect the environment off-site, the department and the Department of Public Safety have the authority to enter the site and investigate the spill. It is the responsibility of the operator to report spills of this nature to the department and the Department of Public Safety as soon as possible, as provided in LAC 33:V.1505.C.1.**

**Response**

Exide acknowledges, understands and will comply with this citation. In the event of a spill that could potentially endanger public health or affect the surrounding environment, Exide understands that the LDEQ and the Department of Public Safety have the authority to enter the site and investigate the spill. In the event of a spill of this magnitude, the operator will report it to the LDEQ and to the Department of Public Safety as soon as possible as specified in Exide's the RCRA Contingency Plan and Emergency Response Plan (Appendix 6), in accordance with LAC 33:V.1505.C.1.

3. **Any spilled material or material trapped in sumps that is a hazardous waste or that will be disposed of as a hazardous waste must be cleaned up in a timely manner.**

**Response**

Exide acknowledges, understands and will comply with this citation. Any spilled material or material trapped in sumps that is a hazardous waste will be disposed of as a hazardous waste in a timely manner. If the material can be reclaimed, the spilled material or material trapped in sumps will be containerized for storage and recycled in the furnaces. If the material cannot be reclaimed, the spilled material or material trapped in sumps will be containerized and disposed off-site at a facility permitted to dispose of the hazardous waste.

**§1507. Security**

- A. **General Requirements. The security system shall insure that site ingress and egress by the public is controlled and that employees are protected from hazards to health resulting from contact with extremely hazardous operations.**

English and in any other language predominant in the area surrounding the facility, and must be legible from a distance of at least 25 feet. Existing signs with a legend other than "Danger - Unauthorized Personnel Keep Out" may be used if the legend on the sign indicates that only authorized personnel are allowed to enter the active portion, and that entry onto the active portion can be dangerous.

**Response**

Signs are posted at 200 foot intervals or less around the three container storage areas, the waste stabilization unit and the containment building. The signs read: "DANGER - HAZARDOUS WASTE AREA - UNAUTHORIZED PERSONNEL KEEP OUT." Signs are also posted at each entrance to the active portion of the facility. The signs read: "DANGER - UNAUTHORIZED PERSONNEL KEEP OUT."

**§1509. General Inspection Requirements**

- A. The owner or operator must inspect his facility for malfunctions and deterioration, operator errors, and discharges which may be causing or may lead to:**
- 1. a release of hazardous waste; or**
  - 2. a threat to human health.**

**The owner or operator must conduct these inspections often enough to identify problems in time to correct them before they harm human health or the environment.**

**Response**

Exide will inspect the facility on a regular basis. The Inspection Plan is included as Appendix 5 and includes the schedule for facility inspections that are designed to detect any malfunction, deterioration, operator errors or discharges that may lead to a release of hazardous waste or a threat to human health or the environment. Problems are identified visually by the inspector and are documented on the inspection forms provided in Appendix 5. If any problems or malfunctions are noted during the inspection, Exide will immediately correct the problem and remedy the situation. Operator errors will be corrected immediately by discussing the situation with the operator and identifying the appropriate methods to conduct the work. Exide will document the repairs and corrective action on the inspection forms. The type of repair or correction depends on the problem or malfunction. Information regarding the error and its correction is shared with other operators at pre-shift meetings to ensure errors are not repeated. For serious errors, a formal incident investigation is also conducted and a report generated, including root cause determination and



action taken to prevent recurrence. Spills and discharges will be managed in accordance with the RCRA Contingency Plan and Emergency Response Plan (Appendix 6). Container deterioration would be corrected by transferring materials to the furnace for recycling or transferring the materials an intact container for additional storage.

**B. Schedule. LAC 33:V.517.G requires the inspection schedule to be submitted with Part II of the permit application. The administrative authority will evaluate the schedule along with the rest of the application to ensure that it adequately protects human health and the environment.**

- 1. The owner or operator must develop and follow a written schedule for inspecting monitoring equipment, safety and emergency equipment, security devices, and operating and structural equipment (such as dikes and sump pumps) that are important to preventing, detecting, or responding to environmental or human health hazards.**

**Response**

Exide acknowledges, understands and will comply with this provision. A written inspection schedule has been developed and is followed on a daily basis. Please refer to the Inspection Plan in Appendix 5 for the Inspection Schedule. The Inspection Plan includes the schedule for facility inspections that are designed to detect any malfunction, deterioration, operator errors or discharges that may lead to a release of hazardous waste or a threat to human health or the environment.

- 2. He must keep this schedule at the facility.**

**Response**

Exide acknowledges and understands this provision. The inspection schedule is kept at the facility as a part of the Inspection Plan. A copy of the Inspection Plan is included in Appendix 5.

- 3. The schedule must identify the types of problems (e.g., malfunctions or deterioration) which are to be looked for during the inspection (e.g., inoperative sump pump, leaking fitting, eroding dike, etc.).**

**Response**

Exide acknowledges, understands and will comply with this provision. The schedule in the Inspection Plan (Appendix 5) identifies types of problems that will be looked for during the inspection.

4. The frequency of inspection may vary for the items on the schedule. However, inspections should be based on the rate of possible deterioration of the equipment and the probability of an environmental or human health incident if the deterioration or malfunction or any operator error goes undetected between inspections. Areas subject to spills, such as loading and unloading areas, must be inspected daily when in use. At a minimum, the inspection schedule must include the terms and frequencies called for in LAC 33:V.1709, 1719, 1721, 1731, 1753-1765, 1907, 1911, 2109, 2309, 2507, 2711, 2907, 3119, and 3205, where applicable.

[Comment: LAC 33:V.517.G requires the inspection schedule to be submitted with Part II of the permit application. The department will evaluate the schedule along with the rest of the application to ensure that it adequately protects human health and the environment. As part of this review, the department may modify or amend the schedule as may be necessary.]

**Response**

Exide acknowledges, understands and will comply with this provision. Please refer to the Inspection Plan (Appendix 5) for the Inspection Schedule. Depending on the item to be inspected, inspections are conducted on a daily, weekly, monthly or quarterly basis.

- C. The owner or operator must remedy any deterioration or malfunction of equipment or structures which the inspection reveals; a schedule must be set up to ensure that the problem does not lead to an environmental or human health hazard. When a hazard is imminent or has already occurred, remedial action must be taken immediately.

**Response**

Exide will remedy any deterioration or malfunction of equipment or structures revealed in the inspection. If a hazard is imminent or has already occurred immediate remedial action will be taken. Otherwise, schedules to remedy the problem will be put into place to ensure that it does not become an environmental or human health hazard.

- D. The owner or operator must record inspections in an inspection log or summary. He must keep these records for at least three years from the date of inspection. At a minimum, these records must include the date and time of the inspection, the name of the inspector, a notation of the observations made, and the date and nature of any repairs or other remedial actions.

### **Response**

Exide will record inspections in an inspection log and will retain these records for at least three years from the date of the inspection. The records will include the date and time of inspection, the inspector's name, any observations made and any repairs or remedial actions taken.

## **§1511. Preparedness and Prevention**

- A. Applicability. The regulations in this Section apply to owners and operators of all hazardous waste facilities.**

### **Response**

Exide understands, acknowledges and will comply with these regulations are applicable to this site.

- B. Design and Operation of a Facility. Facilities must be designed, constructed, maintained, and operated to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water which could threaten human health or the environment.**

### **Response**

Exide understands, acknowledges and will comply with this provision. The three container storage areas, the treatment unit and the Containment Building at Exide have all been designed, maintained and operated to maximize safety of personnel, minimize threats to public health and the environment and to preserve the value of the facilities and promote efficiency and effectiveness of their operation. Exide utilizes the best engineering designs and practices available, conforms to regulatory requirements and pays strict attention to employees' health and safety.

Fires and explosions are initially minimized by not accepting flammable or explosive materials and by not storing incompatible wastes in the same storage area. Materials not acceptable to the facility are returned to the generator. Fires and explosions are also minimized by maintaining a clean facility including daily floor sweeping and decontamination of equipment at the building exits. Releases of materials are minimized by the walls and floors of the Truck/Trailer Storage Area, the Whole Battery Storage Area and the Containment Building. Release of emissions are controlled in the Containment Building through an air handling system such that the building operates under negative pressure. In the event that a fire, explosion or release occurs, the measures indicated in the RCRA Contingency and Emergency Response Plan (Appendix 6) will be followed. Response procedures include contacting the On-Site Coordinator; assessing the situation; notifying the appropriate local and

state agencies; taking measures to prevent recurrence including stopping operations, collecting and containing released substances and isolating tanks; and submitting required reports. The RCRA Contingency and Emergency Response Plan includes assignment of duties to personnel, emergency response procedures, types of emergency situations, procedures for plan or unit shutdowns, the alarm system and types and locations of emergency equipment.

Changes have not occurred to the facility's overall recycling procedures; however, the plans associated with operation of the facility have been modified since the original permit submission to maintain regulatory compliance and safe operations. These plans include the Waste Analysis Plan (Appendix 4), the Inspection Plan and Schedule (Appendix 5), the RCRA Contingency and Emergency Response Plan (Appendix 6), the Dust Suppression Operational Procedure (Appendix 12), the Training Manual (Appendix 13). The requirements of the Spill Prevention, Control and Countermeasures Plan have been incorporated into the RCRA Contingency and Emergency Response Plan (Appendix 6). Historic modifications to these plans are not summarized here as only the most current versions of each of these plans is used at the facility. These plans are included as Appendices to this permit renewal.

**C. Required Equipment. All facilities must be equipped with the following, unless it can be demonstrated to the administrative authority that none of the hazards posed by waste handled at the facility could require a particular kind of equipment specified below:**

- 1. an internal communications or alarm system capable of providing immediate emergency instruction (voice or signal) to facility personnel;**

**Response**

Exide understands, acknowledges and will comply with this provision. Exide has an established internal communications system that includes a facility alarm system, two-way radio communications and a telephone pager system that will all be utilized to provide emergency instructions to facility personnel.

- 2. a device, such as a telephone (immediately available at the scene of operations) or a hand-held two-way radio, capable of summoning emergency assistance from local police departments, fire departments, or state or local emergency response teams;**

### **Response**

Exide understands, acknowledges and will comply with this provision. All supervisors and many of the operators at the facility carry two-way radios to maintain immediate communications. In the event of an emergency, Exide will utilize the two-way radios to call for assistance.

3. **portable fire extinguishers, fire control equipment (including special extinguishing equipment, such as that using foam, inert gas, or dry chemicals), spill control equipment, and decontamination equipment; and**

### **Response**

Exide understands, acknowledges and will comply with this provision. Portable fire extinguishers are located near all possible combustion sources. Exide has Class-D fire extinguishers located in areas where molten metal is handled and also in the Chemical Warehouse where refining chemicals are stored. All of the control room and electrical panels have CO<sub>2</sub> extinguishers. The RCRA Contingency Plan and Emergency Response Plan, included in Appendix 6, outlines the fire extinguisher program and has a map showing the location of all fire extinguishers.

4. **water at adequate volume and pressure to supply water hose streams, or foam producing equipment, or automatic sprinklers, or water spray systems.**

### **Response**

Exide understands, acknowledges and will comply with this provision. Adequate volume and pressure to supply water hoses is provided. Exide maintains two on site water wells, a primary and backup. The water is pumped to a water tower with a capacity of 10,000 gallons. The facility does not maintain a facility-wide sprinkler system. A sprinkler system is maintained at the baghouses.

- D. **Testing and Maintenance of Equipment. All facility communications or alarm systems, fire protection equipment, spill control equipment, and decontamination equipment, where required, must be tested and maintained as necessary to assure its proper operation in time of emergency.**

### **Response**

Exide's emergency response system is tested on a regular basis. All of the fire extinguishers at the facility are inspected at least quarterly, by a certified inspector. A boot wash is provided for personnel decontamination at the main employee entrance and exit to the Containment Building.

Wheel washes are provided for decontamination of equipment cleaning the feed storage portion of the Containment Building. Wheel washes are a automated high-pressure water-spray containment bay. In the unlikely event of an emergency within the Containment Building that would require evacuation of personnel and equipment, the vehicles would be staged in the RCRA permitted truck/trailer storage area until the emergency is controlled. At that time, the vehicles will return to the containment Building if rendered operable, or will proceed to the truck wash-down area for decontamination. All wastewater generated at the personnel and equipment decontamination areas is contained and routed to the wastewater treatment plant. Decontamination equipment, spill control equipment, emergency communications equipment and alarm systems are inspected monthly, as specified in the Inspection Plan (Appendix 5). A checklist of the inspections is kept on file in the Environmental Office. All equipment is maintained in good working condition following the manufacture's specifications. If repairs are needed they are performed immediately.

**E. Access to Communications or Alarm System**

1. **Whenever hazardous waste is being poured, mixed, spread, or otherwise handled, all personnel involved in the operation must have immediate access to an internal alarm or emergency communication device, either directly or through visual or voice contact with another employee, unless it can be demonstrated to the administrative authority that such a device is not required.**

**Response**

Exide understands, acknowledges and will comply with this provision. Any Exide personnel involved in handling hazardous waste will have access to emergency communications, typically in the form of two-way radios.

2. **Anytime there is at least one employee on the premises while the facility is operating, he must have immediate access to a device such as a telephone, immediately available at the scene of operation, or a hand-held two-way radio, capable of summoning external emergency assistance, unless it can be demonstrated to the administrative authority that such a device is not required.**

**Response**

Exide understands, acknowledges and will comply with this provision. Any Exide personnel on the premises will have access to emergency communications, either in the form of two-way

radios, intercom system, or telephone access. These systems will be used to alert employees of the emergency and to give instructions on what action is to be taken. If an emergency occurs during weekday hours, notification will follow the organizational chart provided as Table 1 of the Contingency Plan (Appendix 6). If an emergency occurs during weekends, nights or holidays, the Shift Foreman or Supervisor will notify the Chief Officer and the Communications officers. The Communication Office will then proceed to contact all necessary personnel. Should the telephone and portable 2-way radios become inoperable, selected personnel (runners) will be sent to the effected departments. The telephone system has a battery back-up in the event of a power failure. If the battery back-up unit also fails, the telephone jack located by the front door of the mail office may be used since it is not connected to the plant electricity. The plant alarm siren will also be used to alert employees to the emergency. If the plant alarm siren is to be used the Chief Officer or his designate will instruct one of the Contingency Plan officers to go to the laboratory and sound the alarm. Each employee should respond to instructions being given by the telephone page system. If the page system is inoperative or no instructions are given, employees are to check with their immediate supervisor for further instructions.

The plant alarm siren will also be used to alert employees to the emergency. If the plant alarm siren is to be used the Chief Officer or his designate will instruct one of the Contingency Plan officers to go to the laboratory and sound the alarm. Each employee should respond to instructions being given by the telephone page system. If the page system is inoperative or no instructions are given, employees are to check with their immediate supervisor for further instructions.

### Siren Alarm System

BLAST	FREQUENCY	DESCRIPTION
1 LONG	CONTINUOUS	Low water alarm. Signal to supervision to check and take necessary corrective action to bring the water level in the water tower back up to operating levels.
1 SHORT	SCHEDULED BY TIMER	Notification to employees of work and break schedule.
2 SHORT	INTERMITTENT	Emergency in office or changehouse areas.
3 SHORT	INTERMITTENT	Emergency in the Shop, Lunchroom, Lab or Yard areas.
4 SHORT	INTERMITTENT	Emergency at the Production, Baghouse or Warehouse areas.

BLAST	FREQUENCY	DESCRIPTION
5 SHORT	INTERMITTENT	Emergency at the Battery Breaker, Dust Reverb or Water Treatment areas.
SHORT, LONG, SHORT, LONG	INTERMITTENT	Alarm signal to an emergency involving the total plant and calls for immediate evacuation of the plant. Employees are to follow supervisory instructions or report to front parking lot if no other instructions are given. The short/long blast are to be repeated several times to give notice to all employees.

**Note:** Alarm panel is located in the laboratory.

- F. Required Aisle Space.** The owner or operator must maintain aisle space to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment to any area of facility operation in an emergency, unless it can be demonstrated to the administrative authority that aisle space is not needed for any of these purposes.

**Response**

Exide understands, acknowledges and will comply with this provision. Exide will maintain sufficient aisle space in every area of the plant to allow for unobstructed movement of personnel and equipment in case of emergency.

**G. Arrangements with Local Authorities**

1. The owner or operator must attempt to make the following arrangements, as appropriate for the type of waste handled at his facility and the potential need for the services of these organizations:
  - a. arrangements to familiarize police, fire departments, and emergency response teams with the layout of the facility, properties of hazardous waste handled at the facility and associated hazards, places where facility personnel would normally be working, entrances to and roads inside the facility, and possible evacuation routes;

**Response**

Exide understands, acknowledges and will comply with this provision. In April 2003, Exide delivered copies and received acknowledgement of the RCRA Contingency Plan and Emergency Response Plan from the State Police, the Baker Fire Department and the Alsen Fire Department. The plan documents the layout of the facility, the facility hazards, evacuation routes and location of emergency equipment. The telephone contact numbers for each of these agencies is



listed in the plan and posted in control rooms at the Exide facility. In addition, Exide will offer to conduct a tour of the facility for key representatives of the State Police and both fire departments when the revised Contingency Plan is distributed.

- b. **where more than one police and fire department might respond to an emergency, agreements designating primary emergency authority to a specific police and a specific fire department, and agreements with any others to provide support to the primary emergency authority;**

**Response**

Exide understands, acknowledges and will comply with this provision. Exide has arranged that the Alsen Fire Department be designated as the primary emergency authority and that the Baker Fire Department shall provide support. The telephone contact numbers for each of these agencies is listed in the plan and posted in control rooms at the Exide facility.

- c. **agreements with state emergency response teams, emergency response contractors, and equipment suppliers; and**

**Response**

Exide understands, acknowledges and will comply with this provision. Exide has provided a copy of the RCRA Contingency Plan and Emergency Response Plan to the Louisiana State Police – Right-to-Know Unit. Additionally, Exide has an arrangement with the Louisiana State Police – Hazmat Response Unit. Exide also has contracted CHEMTREC, as a first responder for any over the road spills or emergencies that may occur. The telephone contact numbers for each of these agencies is listed in the plan and posted in control rooms at the Exide facility. It is not anticipated that local law enforcement (i.e. Sheriffs Department) will be contacted during an emergency.

- d. **arrangements to familiarize local hospitals with the properties of hazardous waste handled at the facility and the types of injuries or illnesses which could result from fires, explosions, or releases at the facility.**

Exide understands, acknowledges and will comply with this provision. In April 2003 Exide provided a copy to and

received acknowledgement of the RCRA Contingency Plan and Emergency Response Plan from Lane Memorial Hospital in Zachery, LA., Baton Rouge General Hospital (Florida Boulevard and Picardy Avenue locations) and our Lady of the Lake Hospital. Exide will provide updated copies of the Contingency Plan when the plan is revised and request written documentation to confirm receipt. Exide will offer to conduct a tour of the facility when the Contingency Plan is distributed. Additionally, Exide has contracted Hill Medical Associates to provide medical assistance in non-critical situations.

2. **Where state or local authorities decline to enter into such arrangements, the owner or operator must document the refusal in the operating record.**

**Response**

Exide understands, acknowledges and will comply with this provision. If a state or local authority should decline to enter into an arrangement or decline to continue an agreement, Exide will document the refusal in the operating records.

**§1513. Contingency Plan and Emergency Procedures**

**A. Purpose and Implementation of Contingency Plan**

1. **Each owner or operator must have a contingency plan for his facility. The contingency plan must be designed to minimize hazards to human health or the environment from fires, explosions, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water.**

**Response**

Please refer to the RCRA Contingency Plan and Emergency Response Plan, Appendix 6. The plan was developed to help the facility minimize hazards to human health and the environment from fires, explosions, or unplanned sudden and non-sudden releases of hazardous materials to the environment. The Plan includes assignment of duties to personnel, emergency response procedures, types of emergency situations, procedures for plan or unit shutdowns, the alarm system and types and locations of emergency equipment.

2. **A contingency plan to be implemented in the event of an emergency shall be filed with the administrative authority and,**

after approval, with the local fire and police departments (if any operate in the area), hospitals and emergency response teams operating in the area which are subject to call by the operator or the department.

**Response**

The RCRA Contingency Plan and Emergency Response Plan, is included as Appendix 6. The Plan includes assignment of duties to personnel, emergency response procedures, types of emergency situations, procedures for plant or unit shutdowns, the alarm system and types and locations of emergency equipment. The plan is currently on file with local fire, police departments, hospitals and emergency response teams.

3. **The provisions of the plan must be carried out immediately whenever there is a fire, explosion, or release of hazardous waste or hazardous waste constituents which could threaten human health or the environment.**

**Response**

The provisions of the contingency plan will be carried out immediately whenever there is a fire, explosion, or release of hazardous waste or hazardous waste constituents which could threaten human health or the environment.

4. **The plan shall be revised each time the facility operations are changed due to expansion, change in type or quantity of waste handled, or other changes which affect the degree or type of possible emergency situation.**

**Response**

Exide understands, acknowledges and will comply with this provision. The plan shall be revised each time the facility operations are changed due to expansion, change in type or quantity of waste handled, or other changes that may affect the degree or type of possible emergency situation.

**B. Content of Contingency Plan**

1. **The contingency plan must describe the actions facility personnel must take to comply with LAC 33:V.1513.B and F in response to fires, explosions, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water at the facility.**

### **Response**

Exide understands, acknowledges and will comply with this provision. Exide's RCRA Contingency Plan and Emergency Response Plan describe the actions facility personnel must take in response to fires, explosions, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to the environment. The plan is included in Appendix 6. The Plan includes assignment of duties to personnel, emergency response procedures, types of emergency situations, procedures for plan or unit shutdowns, the alarm system and types and locations of emergency equipment.

2. **If the owner or operator has already prepared a Spill Prevention, Control, and Countermeasures (SPCC) Plan, or some other emergency or contingency plan, he need only amend that plan to incorporate hazardous waste management provisions that are sufficient to comply with these requirements.**

### **Response**

The requirements of the SPCC Plan have been incorporated into the RCRA Contingency Plan and Emergency Response Plan (Appendix 6). The Plan includes facility background, a certification and the facility's preventative measures, and capability and procedures for taking corrective actions and/or countermeasures when a spill event occurs.

3. **The plan must describe arrangements agreed to by local police departments, fire departments, hospitals, contractors, and state and local emergency response teams to coordinate emergency services.**

### **Response**

Please refer to the RCRA Contingency Plan and Emergency Response Plan (Appendix 6). The describes arrangements agreed to by local police departments, fire departments, hospitals, contractors, and state and local emergency response teams to coordinate emergency services. The Plan includes assignment of duties to personnel, emergency response procedures, types of emergency situations, procedures for plan or unit shutdowns, the alarm system and types and locations of emergency equipment.

4. **The plan must list names, addresses, and phone numbers (office and home) of all persons qualified to act as emergency coordinator, and this list must be kept up to date. When more than one person is listed, one must be named as primary**

emergency coordinator and others must be listed in the order in which they will assume responsibility as alternates. For new facilities, this information must be supplied to the administrative authority at the time of certification, rather than at the time of permit application.

**Response**

Please refer to the RCRA Contingency Plan and Emergency Response Plan (Appendix 6). The plan lists the name, addresses, and phone numbers (office and home) of the emergency coordinator and outlines the responsibilities for alternate emergency coordinators in the event that the primary emergency coordinator is not present.

5. The plan must include a list of all emergency equipment (where required) at the facility, such as fire extinguishing systems, spill control equipment, communications and alarm systems (internal and external), and decontamination equipment. This list must be kept up to date. In addition, the plan must include the location and a physical description of each item on the list and a brief outline of its capabilities.

**Response**

The RCRA Contingency Plan and Emergency Response Plan contains a list of all emergency equipment maintained at the facility, including fire extinguishers, sprinkler systems, spill control equipment, communications and alarm systems, and decontamination equipment. This list is kept up to date by Exide's EHS staff. The plan includes the location and a physical description of each item on the list and a brief outline of its capabilities.

6. The plan must include an evacuation plan for facility personnel where there is a possibility that evacuation could be necessary. The plan must describe signals to be used to begin evacuation, evacuation routes, and alternate evacuation routes.

**Response**

Please refer to the RCRA Contingency Plan and Emergency Response Plan (Appendix 6) for the evacuation plan. The evacuation plan includes the routes for evacuation, assembly points and alarm signals to be used for beginning an evacuation.

**C. Copies of Contingency Plan**

- 1. The contingency plan must be submitted to the administrative authority with the permit application and, after modification or approval, will become a condition of any permit issued.**

**Response**

Exide understands, acknowledges and will comply with this provision. The contingency plan is included as a part of this application. See Appendix 6. The Plan includes assignment of duties to personnel, emergency response procedures, types of emergency situations, procedures for plan or unit shutdowns, the alarm system and types and locations of emergency equipment.

- 2. A copy of the contingency plan and all revisions to the plan must be maintained at the facility and additional copies must be submitted to all local police departments, fire departments, hospitals, and state and local emergency response teams that may be called upon to provide emergency services.**

**Response**

Exide will maintain a copy of the contingency plan and all revisions of the plan at the facility. Additional copies have been submitted to the local police departments, fire departments, hospitals, and state and local emergency response teams so that they may be called upon to provide emergency services.

**D. Amendment of Contingency Plan. The contingency plan must be reviewed, and immediately amended, if necessary, whenever:**

- 1. the facility permit is revised;**
- 2. the plan fails in an emergency;**
- 3. applicable regulations are revised;**
- 4. the facility changes its design, construction, operation, maintenance, or other circumstances in a way that materially increases the potential for fires, explosions, or releases of hazardous waste or hazardous waste constituents, or changes the response necessary in an emergency;**
- 5. the list of emergency coordinators changes; or**
- 6. the list of emergency equipment changes.**

### **Response**

Exide acknowledges that if any of the above provisions occur, the contingency plan will be reviewed and immediately amended, if necessary.

- E. Emergency Coordinator.** At all times, there must be at least one employee either on the facility premises or on call (i.e., available to respond to an emergency by reaching the facility within a short period of time) with the responsibility for coordinating all emergency response measures (see LAC 33:V.1513.F). This emergency coordinator must be thoroughly familiar with all aspects of the facility's contingency plan, all operations and activities at the facility, the location and characteristics of waste handled, the location of all records within the facility, and the facility layout. In addition, this person must have the authority to commit the resources needed to carry out the contingency plan.

### **Response**

Exide acknowledges the above requirement to have at least one employee either on the facility premises or on call. The emergency coordinator on call will be familiar with all aspects of the facility, the location and characteristics of waste handled, the location of all records within the facility, and the facility layout. The coordinator will have the resources needed to carry out the contingency plan. Please refer to Appendix 6 for further details. The Plan includes assignment of duties to personnel, emergency response procedures, types of emergency situations, procedures for plan or unit shutdowns, the alarm system and types and locations of emergency equipment.

### **F. Emergency Procedures**

- 1. Whenever there is an imminent or actual emergency situation, the emergency coordinator (or his designee when the emergency coordinator is on call) must immediately:**
  - a. activate internal facility alarms or communication systems, where applicable, to notify all facility personnel; and**
  - b. notify appropriate state or local agencies with designated response roles if their help is needed.**

### **Response**

In an imminent or actual emergency situation, the coordinator will activate internal facility alarms or communications systems, where applicable. In addition the emergency coordinator will notify all facility personnel when

needed and notify the appropriate state or local agencies with designated response roles if their help is needed. Please refer to Appendix 6 for further details. The Plan includes assignment of duties to personnel, emergency response procedures, types of emergency situations, procedures for plan or unit shutdowns, the alarm system and types and locations of emergency equipment.

2. **Whenever there is a release, fire, or explosion, the emergency coordinator must immediately identify the character, exact source, amount, and areal extent of any released materials. He may do this by observation or review of facility records or manifest, and, if necessary, by chemical analysis.**

**Response**

In the event of a release, fire or explosion, the emergency coordinator and his staff will immediately identify the character, exact source, amount, and areal extent of any released materials which may be done by observation or review of facility records, manifest or chemical analysis. Please refer to Appendix 6 for further details. The Plan includes assignment of duties to personnel, emergency response procedures, types of emergency situations, procedures for plan or unit shutdowns, the alarm system and types and locations of emergency equipment.

3. **Concurrently, the emergency coordinator must assess possible hazards to human health or the environment that may result from the release, fire or explosion. This assessment must consider both direct and indirect effects of the release, fire, or explosion (e.g., the effects of any toxic, irritating, or asphyxiating gases that are generated, or the effects of any hazardous surface water run-off from water or chemical agents used to control fire and heat-induced explosions).**

**Response**

The emergency coordinator and his staff will assess possible hazards to human health or the environment as a result of the release, fire or explosion. This assessment will take into account the above provisions. Please refer to Appendix 6 for further details. The Plan includes assignment of duties to personnel, emergency response procedures, types of emergency situations, procedures for plan or unit shutdowns, the alarm system and types and locations of emergency equipment.

4. **If the emergency coordinator determines that the facility has had a release, fire, or explosion which could threaten human**



health or the environment outside the facility, he must report his findings as follows:

- a. if his assessment indicates that evacuation of local areas may be advisable, he must immediately notify appropriate local authorities. He must be available to help appropriate officials decide whether local areas should be evacuated; and
- b. he must immediately notify the state official designated as the on-scene coordinator for that geographical area and provide:
  - i. name and telephone number of reporter;
  - ii. name and address of facility;
  - iii. time and type of incident (e.g., release, fire);
  - iv. name and quantity of material(s) involved, to the extent known;
  - v. the extent of injuries, if any; and
  - vi. the possible hazards to human health or the environment, outside the facility.

#### **Response**

In the event that a release, fire or explosion has occurred that could threaten human health or the environment outside the facility, Exide will complete a report detailing the findings, as specified in this citation. Please refer to Appendix 6 for further details. The Plan includes assignment of duties to personnel, emergency response procedures, types of emergency situations, procedures for plan or unit shutdowns, the alarm system and types and locations of emergency equipment.

- 5. During an emergency, the emergency coordinator must take all reasonable measures necessary to ensure that fires, explosions, and releases do not occur, recur, or spread to other hazardous waste at the facility. These measures must include, where applicable, stopping processes and operations, collecting and containing released waste, and removing or isolating containers.

#### **Response**

During an emergency, the emergency coordinator and his staff will take all reasonable measures necessary to ensure that fires, explosions, and releases do not occur, recur, or spread to other hazardous waste at the facility. These measures include stopping

processes or operations, collecting and containing released waste, and removing or isolating containers, when applicable. Please refer to Appendix 6 for further details. The Plan includes assignment of duties to personnel, emergency response procedures, types of emergency situations, procedures for plan or unit shutdowns, the alarm system and types and locations of emergency equipment.

6. **If the facility stops operation in response to a fire, explosion, or release, the emergency coordinator must monitor for leaks, pressure buildup, gas generation, or ruptures in valves, pipes, or other equipment, wherever this is appropriate.**

**Response**

In the event that the facility stops operation due to a fire, explosion, or release, the emergency coordinator and his staff will monitor for leaks, pressure buildup, gas generation, or ruptures in valves, pipes, or other equipment, wherever this is appropriate.

7. **Immediately after an emergency, the emergency coordinator must provide for treating, storing, or disposing of recovered waste, contaminated soil, or surface water, or any other material that results from a release, fire, or explosion at the facility. Unless the owner or operator can demonstrate that the recovered material is not a hazardous waste, the owner or operator becomes a generator of hazardous waste and must manage it in accordance with all applicable requirements.**

**Response**

Immediately after an emergency, the emergency coordinator and his staff will provide for treating, storing, or disposing of recovered waste, contaminated soil, or surface water, or any other material that results from a release, fire, or explosion at the facility. Exide understands that unless the owner or operator can demonstrate that the recovered material is not a hazardous waste, the owner or operator becomes a generator of hazardous waste and must manage it in accordance with all applicable requirements.

8. **The emergency coordinator must ensure that in the affected area(s) of the facility:**
  - a. **no waste that may be incompatible with the released material is treated, stored, or disposed of until cleanup procedures are completed; and**

- b. all emergency equipment listed in the contingency plan is cleaned and fit for its intended use before operations are resumed.**

**Response**

Exide understands and will abide by the above provisions. Any equipment used to respond to an on-site emergency will be cleaned by scrapping and water spray, and if necessary, hand scrubbing to remove visual waste or sediment material. Decontamination activities will occur in a paved area of the facility. Decontamination water will be collected by the facility Wastewater Drainage and Collection System and processed in the on-site treatment system. Please refer to Appendix 6 for further details. The Plan includes assignment of duties to personnel, emergency response procedures, types of emergency situations, procedures for plan or unit shutdowns, the alarm system and types and locations of emergency equipment.

- 9. The owner or operator must notify the administrative authority and appropriate state and local authorities that the facility is in compliance with LAC 33:V.1513.F.8 before operations are resumed in the affected area(s) of the facility.**

**Response**

Exide understands and will abide by the above provisions. Exide will notify the administrative authority and appropriate state and local authorities that the facility is in compliance with LAC 33:V.1513.F.8 before operations are resumed in the affected area(s) of the facility.

- 10. The owner or operator must note in the operating record the time, date, and details of any incident that requires implementation of the contingency plan. Within 15 days after the incident, he must submit a written report on the incident to the administrative authority which includes:**

- a. name, address, and telephone number of the owner or operator;**
  - b. name, address, and telephone number of the facility;**
  - c. date, time, and type of incident (e.g., fire, explosion);**
  - d. name and quantity of material(s) involved;**
  - e. the extent of injuries, if any;**

- f. an assessment of actual or potential hazards to human health or the environment, where this is applicable; and
- g. estimated quantity and disposition of recovered material that resulted from the incident.

**Response**

Exide will note the time, date, and details of any incident requiring implementation of the contingency plan in the operating record. Within 15 days after the incident, a written report on the incident will be submitted including the above provisions.

**§1515. Personnel Training**

**A. Instruction Program**

- 1. Facility personnel must successfully complete a program of classroom instruction or on-the-job training that teaches them to perform their duties in a way that ensures the facility's compliance with the requirements of this Section. The owner or operator must ensure that this program includes all the elements described in the document required in LAC 33:V.1515.D.3.

**Response**

Exide understands and will abide by the above provisions. All facility personnel have completed training, both on-the-job and classroom instruction, to teach them to perform their duties so that the facility is in compliance with the applicable regulations. Training topics include medical surveillance, lockout/tagout, confined space entry, hearing conservation, respiratory protection, powered industrial truck safety, hazard communication, HAZWOPER, emergency and contingency, environmental regulations, spill response, work practice, DOT hazardous materials, sexual harassment, blood borne pathogens, heat stress, fire extinguisher use, incipient fire control, fall protection, slip trip and fall hazard avoidance, proper lifting techniques and back protection. A copy of the current employee Training Manual is enclosed as Appendix 13. Training records are maintained on-site.

- 2. This program must be directed by a person trained in hazardous waste management procedures, and must include instruction which teaches facility personnel hazardous waste management procedures (including contingency plan implementation) relevant to the positions in which they are employed.

must keep a copy of this written notice as part of the operating record.

**Response**

Exide acknowledges, understands and will comply with this provision.

- F. **Unmanifested Waste Reports.** Any wastes presented for disposal that are not accompanied by a properly completed manifest shall be rejected. The TSD operator shall note the name of the driver, hauler, and the vehicle identification numbers. He shall notify the administrative authority by phone immediately and in writing within seven days of the refusal to accept the waste and provide the administrative authority with the required information.

**Response**

Exide does not accept waste for disposal. However, if a recyclable material is not properly manifested it will be rejected. Exide will provide the required notification.

**§1529. Operating Record and Reporting Requirements**

- A. **The owner or operator must keep a written operating record at his facility.**

**Response**

Exide acknowledges, understands and will comply with this provision and will keep written operating records at the Baton Rouge smelter.

- B. **Records of each hazardous waste received, treated, stored, or disposed of at the facility must be recorded in the following manner, as they become available, and maintained in the operating record until closure of the facility.**

1. **A description by its common name and the EPA hazardous waste number(s) (LAC 33:V.Chapter 49) which apply to the waste and the quantity of the waste received. The waste description also must include the waste's physical form, i.e., liquid, sludge, solid, or contained gas. If the waste is not listed in LAC 33:V.Chapter 49, the description also must include the process that produced it.**

**Response**

Exide maintains records of each hazardous waste received for recycling. The records include a description of the waste by common name, EPA number and physical form. Whole unbroken lead-acid batteries contain an acidic liquid, but whole unbroken

batteries are specifically excluded as a hazardous waste. Exide does not accept any other waste containing free liquids.

2. Each hazardous waste listed in LAC 33:V.109, and each hazardous waste characteristic defined in LAC 33:V.105.B has a four-digit EPA hazardous waste number assigned to it. This number must be used for recordkeeping and reporting purposes. Where a hazardous waste contains more than one listed hazardous waste, or where more than one hazardous waste characteristic applies to the waste, the waste description must include all applicable EPA hazardous waste numbers.

**Response**

Exide uses all applicable EPA Hazardous Waste Numbers for record keeping purposes.

3. Record the estimated or manifest-reported weight, or volume and density, where applicable, in one of the units of measure specified in Table 1.

Table 1. Units For Reporting	
Units of Measure	Code <sup>1</sup>
Gallons	G
Gallons per hour	E
Gallons per Day	U
Liters	L
Liters per Hour	H
Liters per Day	V
Short Tons per Hour	D
Metric Tons per Hour	W
Short Tons per Day	N
Metric Tons per Day	S
Pounds per Hour	J
Kilograms per Hour	R
Cubic Yards	Y
Cubic Meters	C
Acres	B
Acre-feet	A
Hectares	Q
Hectare-meter	F

Btu's per Hour	I
<sup>1</sup> Single digit symbols are used here for data processing purposes.	

### Response

Exide records the weight of received materials in the units specified above.

4. The method(s) (by handling code(s) as specified in Table 2) and date(s) of treatment, storage, or disposal.

Table 2. Handling Codes for Treatment, Storage, and Disposal Methods
Enter the handling code(s) listed below that most closely represents the technique(s) used at the facility to treat, store, or dispose of each quantity of hazardous waste received.
<b>Storage</b>
S01 Container (barrel, drum, etc.)
S02 Tank
S03 Waste Pile
S04 Surface Impoundment
S05 Drip Pad
S06 Containment Building (Storage)
S99 Other Storage (specify)
<b>Treatment</b>
<b>Thermal Treatment</b>
T06 Liquid injection incinerator
T07 Rotary kiln incinerator
T08 Fluidized bed incinerator
T09 Multiple hearth incinerator
T10 Infrared furnace incinerator
T11 Molten salt destructor
T12 Pyrolysis
T13 Wet air oxidation
T14 Calcination
T15 Microwave discharge
T18 Other (specify)

<b>Chemical Treatment</b>
T19 Absorption mound
T20 Absorption field
T21 Chemical fixation
T22 Chemical oxidation
T23 Chemical precipitation
T24 Chemical reduction
T25 Chlorination
T26 Chlorinolysis
T27 Cyanide destruction
T28 Degradation
T29 Detoxification
T30 Ion exchange
T31 Neutralization
T32 Ozonation
T33 Photolysis
T34 Other (specify)
<b>Physical Treatment</b>
<b>Separation of Components:</b>
T35 Centrifugation
T36 Clarification
T37 Coagulation
T38 Decanting
T39 Encapsulation
T40 Filtration
T41 Flocculation
T42 Flotation
T43 Foaming
T44 Sedimentation
T45 Thickening
T46 Ultrafiltration
T47 Other (specify)
<b>Removal of Specific Components:</b>
T48 Absorption-molecular sieve
T49 Activated carbon
T50 Blending
T51 Catalysis



<b>T52 Crystallization</b>
<b>T53 Dialysis</b>
<b>T54 Distillation</b>
<b>T55 Electrodialysis</b>
<b>T56 Electrolysis</b>
<b>T57 Evaporation</b>
<b>T58 High gradient magnetic separation</b>
<b>T59 Leaching</b>
<b>T60 Liquid ion exchange</b>
<b>T61 Liquid-liquid extraction</b>
<b>T62 Reverse osmosis</b>
<b>T63 Solvent recovery</b>
<b>T64 Stripping</b>
<b>T65 Sand filter</b>
<b>T66 Other (specify)</b>
<b>Biological Treatment</b>
<b>T67 Activated sludge</b>
<b>T68 Aerobic lagoon</b>
<b>T69 Aerobic tank</b>
<b>T70 Anaerobic tank</b>
<b>T71 Composting</b>
<b>T72 Septic tank</b>
<b>T73 Spray irrigation</b>
<b>T74 Thickening filter</b>
<b>T75 Tricking filter</b>
<b>T76 Waste stabilization pond</b>
<b>T77 Other (specify)</b>
<b>T78 [Reserved]</b>
<b>T79 [Reserved]</b>
<b>Boilers and Industrial Furnaces</b>
<b>T80 Boiler</b>
<b>T81 Cement Kiln</b>
<b>T82 Lime Kiln</b>
<b>T83 Aggregate Kiln</b>
<b>T84 Phosphate Kiln</b>
<b>T85 Coke Oven</b>
<b>T86 Blast Furnace</b>

<b>T87 Smelting, Melting, or Refining Furnace</b>
<b>T88 Titanium Dioxide Chloride Process Oxidation Reactor</b>
<b>T89 Methane Reforming Furnace</b>
<b>T90 Pulping Liquor Recovery Furnace</b>
<b>T91 Combustion Device Used in the Recovery of Sulfur Values from Spent Sulfuric Acid</b>
<b>T92 Halogen Acid Furnaces</b>
<b>T93 Other Industrial Furnaces Listed in LAC 33:V.109 (specify)</b>
<b>Other Treatment</b>
<b>T94 Containment Building (Treatment)</b>
<b>Disposal</b>
<b>D79 Underground Injection</b>
<b>D80 Landfill</b>
<b>D81 Land Treatment</b>
<b>D82 Ocean Disposal</b>
<b>D83 Surface Impoundment (to be closed as a landfill)</b>
<b>D99 Other Disposal (specify)</b>
<b>Miscellaneous (Chapter 32)</b>
<b>X01 Open Burning/Open Detonation</b>
<b>X02 Mechanical Processing</b>
<b>X03 Thermal Unit</b>
<b>X04 Geologic Repository</b>
<b>X99 Other Chapter 32 (specify)</b>

#### **Response**

Exide will record the handling codes for treatment and storage of waste. The date of waste receipt at the facility is also recorded. Wastes are placed in the Containment Building the same day they are received.

5. The location of each hazardous waste within the facility and the quantity at each location. For disposal facilities, the location and quantity of each hazardous waste must be

recorded on a map or diagram of each cell or disposal area. For all facilities, this information must include cross-references to specific manifest document numbers, if the waste was accompanied by a manifest.

**Response**

The location and quantity of each hazardous waste at the Baton Rouge smelter is recorded.

6. **Records and results of waste analyses and waste determinations performed as specified in these regulations and in LAC 33:V.1517, 1519, 1711, 1741, 1753, 2237.A, 2245, 2515, and 3107.**

**Response**

The records and results of waste analysis and waste determination are kept at the Baton Rouge smelter.

7. **Summary reports and details of all incidents that require implementing the contingency plan.**

**Response**

Exide maintains reports and details of all incidents that required the implementation of the contingency plan.

8. **Records and results of inspections required by LAC 33:V.1509.D.**

**Response**

Exide maintains all inspection reports on file at the Baton Rouge smelter.

9. **Monitoring, testing, or analytical data, and corrective action where required by LAC 33:V.1504, 1711.C–F, 1713, 1741.D–I, 1743, 1751–1767, 1903, 1907, 1911, 2304, 2306, 2309, 2504, 2507, 2508, 2509, 2709, 2711, 2719, 2904, 2906, 2907, 3119, 3203, 3205, and Chapter 33, as well as corrective action cites.**

**Response**

Exide maintains in the environmental files all monitoring, testing, or analytical data, and corrective action data required by LAC 33:V.1504, 1711.C–F, 1713, 1741.D–I, 1743, 1751–1767, 1903, 1907, 1911, 2304, 2306, 2309, 2504, 2507, 2508, 2509, 2709, 2711, 2719, 2904, 2906, 2907, 3119, 3203, 3205, and Chapter 33, as well as corrective action cites. Changes to the environmental

files have occurred since the original permit application as data has been added to the facility records.

10. **For off-site facilities, notices to generators that the TSD facility has the appropriate permits for and will accept the waste the generator is shipping.**

**Response**

Exide notifies generators and maintains documentation that we have the appropriate permits for accepting waste.

11. **All closure cost estimates and, for disposal facilities, all post-closure cost estimates.**

**Response**

Exide maintains all required closure cost and post-closure cost estimates. The closure cost and post-closure cost estimates were last revised in 2000 and have been adjusted for inflation to reflect 2006 costs. Appendix 8 contains a copy of the Closure Plan for the Baton Rouge smelter. The Closure Plan includes general closure procedures; specific closure procedures for the slag stabilization area, the containment building, the K069/D008 storage area, the Truck/Trailer storage area and the whole battery storage area; post-closure care procedures; and a closure and post-closure cost estimate.

12. **Records of the quantities (and date of placement) for each shipment of hazardous waste placed in land disposal units under an extension to the effective date of any land disposal prohibition granted in accordance with LAC 33:V.2239, a petition approved in accordance with LAC 33:V.2241 or 2271, a determination made under LAC 33:V.2273, or a certification under LAC 33:V.2235 and the applicable notice required by a generator under LAC 33:V.2245.**

**Response**

Exide does not dispose of hazardous waste by land disposal; therefore, this section is not applicable.

13. **For an off-site treatment facility, a copy of the notice, and the certification and demonstration, if applicable, required of the generator or the owner or operator under LAC 33:V.2235, 2245, or 2247.**

**Response**

Exide disposes of the following wastes at off-site recycling or treatment and disposal facilities: used oil, refractory brick, tin dross, paint waste and nickel-cadmium batteries. Exide has submitted the required notice, certification and demonstration for used oil, refractory brick, paint waste and nickel cadmium batteries as required under LAC 33:V.2235, 2245, and 2247. Notice is not required for the tin dross as it is exempted because it is not a solid waste. The notice, certification, and/or demonstration will be resubmitted if changes in the waste occur. A copy of these records is maintained on-site.

14. For an on-site treatment facility, the information contained in the notice (except the manifest number), and the certification and demonstration, if applicable, required of the generator or the owner or operator under LAC 33:V.2235, 2245, or 2247.

**Response**

Each generator sending materials to Exide for recycling is required to submit an initial notice, certification and demonstration as required by LAC 33:V.2235, 2245, or 2247. A revised notice, certification and demonstration are required if changes in the waste stream occur. A copy of these records is maintained on-site.

15. For an off-site land disposal facility, a copy of the notice, and the certification and demonstration, if applicable, required of the generator or the owner or operator of a treatment facility under LAC 33:V.2235, 2245, or 2247, whichever is applicable.

**Response**

Exide does not operate off-site land disposal facilities; therefore, this section does not apply.

16. For an on-site land disposal facility, the information contained in the notice required of the generator or owner or operator of a treatment facility under LAC 33:V.2245 or LAC 33:V.2247, except for the manifest number, and the certification and demonstration, if applicable, required under LAC 33:V.2235, whichever is applicable.

**Response**

Exide does not dispose of hazardous waste in an onsite landfill. Exide operates an approved solid waste landfill that accepts only stabilized blast furnace slag and construction debris. Exide maintains all required records for the landfill.

17. For an off-site storage facility, a copy of the notice, and the certification and demonstration, if applicable, required of the generator or the owner or operator under LAC 33:V.2235, 2245, or 2247; and

**Response**

Exide does not operate or use an off-site storage facility; therefore, this section does not apply.

18. For an on-site storage facility, the information contained in the notice (except the manifest number), and the certification and demonstration, if applicable, required of the generator or the owner or operator under LAC 33:V.2235, 2245, or 2247.

**Response**

Exide maintains all of the required on-site storage records.

19. A certification by the permittee no less often than annually, that the permittee has a program in place to reduce the volume and toxicity of hazardous waste that he generates to the degree determined by the permittee to be economically practicable; and the proposed method of treatment, storage or disposal is that practicable method currently available to the permittee which minimizes the present and future threat to human health and the environment.

**Response**

Exide currently performs an annual certification that demonstrates a program is in place to reduce the volume and toxicity of the hazardous waste that is generated at the facility. This certification states that the method of treatment, storage and disposal serves to minimize the present and future threat to human health and the environment. A copy of this latest certification is included as Appendix 15, Waste Minimization Plan. The Waste Minimization Plan includes a waste minimization assessment, types of waste minimization practices, and conclusions.

20. Any records required under LAC 33:V.1501.H.13.

**Response**

Exide acknowledges, understands and will comply with this provision; however, Exide is not a remediation waste management site and therefore this section does not apply.

**C. Availability, Retention, and Disposition of Records**

- 1. All records, including plans, required under this Part must be furnished upon request, and made available at all reasonable times for inspection, by any officer, employee, or representatives who are duly designated by the administrative authority.**

**Response**

Exide acknowledges, understands and will comply with this provision.

- 2. The retention period for all records required under this Section is extended automatically during the course of any unresolved enforcement action regarding the facility or as requested by the administrative authority.**

**Response**

Exide acknowledges, understands and will comply with this provision.

- 3. A copy of records of waste disposal locations and quantities must be submitted to the administrative authority and local land authority upon closure of the facility.**

**Response**

Exide acknowledges, understands and will comply with this provision.

- D. Annual Report. The owner or operator must prepare and submit a single copy of an annual report to the administrative authority by March 1 of each year. The report form must be used for this report. The annual report must cover facility activities during the previous calendar year. Information submitted on a more frequent basis may be included by reference or in synopsis form where it is not pertinent to reporting under LAC 33:V.Chapter 9 or monitoring reporting under LAC 33:V.3317. It must include the following information:**

- 1. the EPA identification number, name, and address of the facility;**
- 2. the calendar year covered by the report;**
- 3. for off-site facilities, the EPA identification number of each hazardous waste generator from which the facility received a hazardous waste during the year. For imported shipments, the**

report must give the name and address of the foreign generator;

4. a description and the quantity of each hazardous waste the facility received during the year. For off-site facilities, this information must be listed by EPA identification number of each generator;
5. the method of treatment, storage, or disposal for each hazardous waste;
6. the most recent closure cost estimate under LAC 33:V.3705, and, for disposal facilities, the most recent post-closure cost estimate under LAC 33:V.3709;
7. the certification signed by the owner or operator of the facility or his authorized representative; and
8. monitoring data where required;
9. for generators who treat, store, or dispose of hazardous waste on-site, a description of the efforts undertaken during the year to reduce the volume and toxicity of waste generated;
10. for generators who treat, store, or dispose of hazardous waste on-site, a description of the changes in volume and toxicity of waste actually achieved during the year in comparison to previous years to the extent such information is available for the years prior to 1984.

**Response**

Exide acknowledges, understands and will comply with the above requirements.

- E. Additional Reports.** In addition to submitting the annual reports and unmanifested waste reports described in LAC 33:V.1529.D and 909, the owner or operator must also report to the administrative authority:

1. releases, fires, and explosions as specified in LAC 33:V.1513.F.10;
2. facility closures as specified in LAC 33:V.Chapter 35; and
3. as otherwise required by LAC 33:V.Chapters 17, 23, 25, 27, 29, and 33.



**Response**

Exide understands, acknowledges and will comply with the above requirement.

**§1531. Required Notices**

- A. The owner or operator of a facility that has arranged to receive hazardous waste from a foreign source must notify the administrative authority in writing at least four weeks in advance of the date the waste is expected to arrive at the facility. Notice of subsequent shipments of the same waste from the same foreign source is not required.

**Response**

Exide acknowledges, understands and will comply with this provision; however, Exide does not receive hazardous waste from foreign sources.

- B. The owner or operator of a recovery facility that has arranged to receive hazardous waste subject to LAC 33:V.Chapter 11.Subchapter B must provide a copy of the tracking document bearing all required signatures to the notifier, to the Office of Enforcement and Compliance Assurance, Office of Compliance, Enforcement Planning, Targeting and Data Division (2222A), Environmental Protection Agency, 401 M Street, SW, Washington, DC 20460, and to the competent authorities of all other concerned countries within three working days of receipt of the shipment. The original of the signed tracking document must be maintained at the facility for at least three years.

**Response**

Exide acknowledges, understands and will comply with this provision; however, Exide does not receive hazardous waste from transfrontier shipments.

- C. The owner or operator of a facility that receives hazardous waste from an off-site source (except where the owner or operator is also the generator) must inform the generator in writing that he has the appropriate permit(s) for, and will accept, the waste the generator is shipping. The owner or operator must keep a copy of this written notice as part of the operating record.

**Response**

Exide acknowledges and will comply with this provision.

- D. Before transferring ownership or operation of a facility during its operating life, or of a disposal facility during the post-closure care

**RESPONSE  
ATTACHMENT 17**

## **CHAPTER 17**

### **AIR EMISSION STANDARDS**

at the site to accept the hazardous waste normally managed in the surface impoundment. In this case, the owner or operator shall repair the defect the next time the process or unit that is generating the hazardous waste managed in the surface impoundment stops operation. Repair of the defect shall be completed before the process or unit resumes operation.

- G.** Following the initial inspection and monitoring of the cover as required by the applicable provisions of this Subchapter, subsequent inspection and monitoring may be performed at intervals longer than one year in the case when inspecting or monitoring the cover would expose a worker to dangerous, hazardous, or other unsafe conditions. In this case, the owner or operator may designate the cover as an "unsafe to inspect and monitor cover" and comply with all of the following requirements:

1. prepare a written explanation for the cover stating the reasons why the cover is unsafe to visually inspect or to monitor, if required; and
2. develop and implement a written plan and schedule to inspect and monitor the cover using the procedures specified in the applicable section of this Subchapter as frequently as practicable during those times when a worker can safely access the cover.

#### **§1759. Standards: Containers**

- A.** The provisions of this Section apply to the control of air pollutant emissions from containers for which LAC 33:V.1751.B references the use of this Section for such air emission control.

##### **Response**

Exide stores hazardous waste in DOT-approved 55-gallon drums in the K069/D008 container storage area and spent lead-acid batteries at the Whole Battery Storage Area and Truck/Trailer Storage Area. Exide also operates an air handling and treatment system as part of operations at the Containment Building. A schematic drawing of the air handling system is provided as Figure 10.

- B.** General Requirements

1. The owner or operator shall control air pollutant emissions from each container subject to this Section in accordance with

the following requirements, as applicable to the container, except when the special provisions for waste stabilization processes specified in Subsection B.2 of this Section apply to the container:

- a. for a container having a design capacity greater than 0.1 m<sup>3</sup> and less than or equal to 0.46 m<sup>3</sup>, the owner or operator shall control air pollutant emissions from the container in accordance with the Container Level 1 standards specified in Subsection C of this Section;

**Response**

Exide stores hazardous wastes in containers with design capacities greater than 0.1 m<sup>3</sup> and less than or equal to 0.46 m<sup>3</sup>. Air pollutant emissions from these containers will be controlled per Level 1 standards.

- b. for a container having a design capacity greater than 0.46 m<sup>3</sup> that is not in light material service, the owner or operator shall control air pollutant emissions from the container in accordance with the Container Level 1 standards specified in Subsection C of this Section; and
- c. for a container having a design capacity greater than 0.46 m<sup>3</sup> that is in light material service, the owner or operator shall control air pollutant emissions from the container in accordance with the Container Level 2 standards specified in Subsection D of this Section.

2. When a container having a design capacity greater than 0.1 m<sup>3</sup> is used for treatment of a hazardous waste by a waste stabilization process, the owner or operator shall control air pollutant emissions from the container in accordance with the Container Level 3 standards specified in Subsection E of this Section at those times during the waste stabilization process when the hazardous waste in the container is exposed to the atmosphere.

**Response**

As Exide does not use containers of any size for treatment of hazardous waste, therefore Level 3 standards do not apply.

## **C. Container Level 1 Standards**

- 1. A container using Container Level 1 controls is one of the following:**
  - a. a container that meets the applicable U.S. Department of Transportation (DOT) regulations on packaging hazardous materials for transportation, as specified in Subsection F of this Section;**
  - b. a container equipped with a cover and closure devices that form a continuous barrier over the container openings such that when the cover and closure devices are secured in the closed position there are no visible holes, gaps, or other open spaces into the interior of the container. The cover may be a separate cover installed on the container (e.g., a lid on a drum or a suitably secured tarp on a roll-off box) or may be an integral part of the container structural design (e.g., a "portable tank" or bulk cargo container equipped with a screw-type cap);**
  - c. an open-top container in which an organic-vapor-suppressing barrier is placed on or over the hazardous waste in the container such that no hazardous waste is exposed to the atmosphere. One example of such a barrier is application of a suitable organic-vapor-suppressing foam.**

### **Response**

Hazardous waste is stored in DOT-approved 55 gallon drums with lids.

- 2. A container used to meet the requirements of Subsection C.1.b or c of this Section shall be equipped with covers and closure devices, as applicable to the container, that are composed of suitable materials to minimize exposure of the hazardous waste to the atmosphere and to maintain the equipment integrity, for as long as the container is in service. Factors to**

be considered in selecting the materials of construction and designing the cover and closure devices shall include: organic vapor permeability; the effects of contact with the hazardous waste or its vapor managed in the container; the effects of outdoor exposure of the closure device or cover material to wind, moisture, and sunlight; and the operating practices for which the container is intended to be used.

### **Response**

Exide does not use containers to meet the requirements of subsection C.1.b or c of this section.

3. **Whenever a hazardous waste is in a container using Container Level 1 controls, the owner or operator shall install all covers and closure devices for the container, as applicable to the container, and secure and maintain each closure device in the closed position except as follows:**
  - a. **opening of a closure device or cover is allowed for the purpose of adding hazardous waste or other material to the container as follows:**
    - i. **in the case when the container is filled to the intended final level in one continuous operation, the owner or operator shall promptly secure the closure devices in the closed position and install the covers, as applicable to the container, upon conclusion of the filling operation; and**
    - ii. **in the case when discrete quantities or batches of material intermittently are added to the container over a period of time, the owner or operator shall promptly secure the closure devices in the closed position and install covers, as applicable to the container, upon either the container being filled to the intended final level, the completion of a batch loading after which no additional material will be added to the container within 15 minutes, the person performing the loading operation leaving the immediate vicinity of the container, or the shutdown of the process generating the material**

being added to the container, whichever condition occurs first;

**Response**

Containers (i.e., 55 gallon drums) holding hazardous wastes are kept closed during storage except when adding or removing waste. Container storage areas are inspected for open containers and noted on an inspection form. An example inspection form has been included with the Inspection Plan and Schedule in Appendix 5.

- b. opening of a closure device or cover is allowed for the purpose of removing hazardous waste from the container as follows:
  - i. for the purpose of meeting the requirements of this Section an empty container, as defined in LAC 33:V.109, may be open to the atmosphere at any time (i.e., covers and closure devices are not required to be secured in the closed position on an empty container);
  - ii. in the case when discrete quantities or batches of material are removed from the container but the container does not meet the conditions to be an empty container, as defined in LAC 33:V.109, the owner or operator shall promptly secure the closure devices in the closed position and install covers, as applicable to the container, upon the completion of a batch removal after which no additional material will be removed from the container within 15 minutes or the person performing the unloading operation leaves the immediate vicinity of the container, whichever condition occurs first;

**Response**

Containers holding hazardous wastes are kept closed during storage except when adding or removing waste. Container storage areas are inspected for open containers and noted on an inspection form. An example inspection form has been included with the Inspection Plan and Schedule in Appendix 5.



- c. opening of a closure device or cover is allowed when access inside the container is needed to perform routine activities other than transfer of hazardous waste. Examples of such activities include those times when a worker needs to open a port to measure the depth of or sample the material in the container or when a worker needs to open a manhole hatch to access equipment inside the container. Following completion of the activity the owner or operator shall promptly secure the closure device in the closed position or reinstall the cover, as applicable to the container;

**Response**

Exide acknowledges, understands and will comply with this requirement.

- d. opening of a spring-loaded pressure-vacuum relief valve, conservation vent, or similar type of pressure relief device that vents to the atmosphere is allowed during normal operations for the purpose of maintaining the internal pressure of the container in accordance with the container design specifications. The device shall be designed to operate with no detectable organic emissions when the device is secured in the closed position. The settings at which the device opens shall be established such that the device remains in the closed position whenever the internal pressure of the container is within the internal pressure operating range determined by the owner or operator based on container manufacturer recommendations, applicable regulations, fire protection and prevention codes, standard engineering codes and practices, or other requirements for the safe handling of flammable, ignitable, explosive, reactive, or hazardous materials. Examples of normal operating conditions that may require these devices to open are during those times when the internal pressure of the container exceeds the internal pressure operating range for the container as a result of loading operations or diurnal ambient temperature fluctuations; and

**Response**

Exide acknowledges, understands and will comply with this requirement.

- e. opening of a safety device, as defined in LAC 33:V.4721, is allowed at any time conditions require doing so to avoid an unsafe condition.

**Response**

Exide acknowledges, understands and will comply with this requirement.

- 4. The owner or operator of containers using Container Level 1 controls shall inspect the containers and their covers and closure devices as follows:
  - a. in the case when a hazardous waste already is in the container at the time the owner or operator first accepts possession of the container at the facility and the container is not emptied within 24 hours after the container is accepted at the facility (i.e., does not meet the conditions for an empty container as specified in LAC 33:V.109), the owner or operator shall visually inspect the container and its cover and closure devices to check for visible cracks, holes, gaps, or other open spaces into the interior of the container when the cover and closure devices are secured in the closed position. The container visual inspection shall be conducted on or before the date that the LAC 33:V.Chapter 17.Subchapter C container is accepted at the facility (i.e., the date the container becomes subject to the container standards of this Section). For purposes of this requirement, the date of acceptance is the date of signature that the facility owner or operator enters on Item 20 of the Uniform Hazardous Waste Manifest (EPA Forms 8700-22 and 8700-22A, DEQ Form HW-3), as required under LAC 33:V.905. If a defect is detected, the owner or operator shall repair the defect in accordance with the requirements of Subsection C.4.c of this Section;
  - b. in the case when a container used for managing hazardous waste remains at the facility for a period of one year or more, the owner or operator shall visually inspect the container and its cover and closure devices initially and, thereafter, at least once every 12 months, to check for visible cracks, holes, gaps, or other open spaces into the interior of the container when the cover and closure devices are secured in the closed position.

If a defect is detected, the owner or operator shall repair the defect in accordance with the requirements of Subsection C.4.c of this Section;

- c. when a defect is detected for the container, cover, or closure devices, the owner or operator shall make first efforts at repair of the defect no later than 24 hours after detection, and repair shall be completed as soon as possible, but no later than five calendar days, after detection. If repair of a defect cannot be completed within five calendar days, then the hazardous waste shall be removed from the container and the container shall not be used to manage hazardous waste until the defect is repaired.

**Response**

Exide will comply with these requirements. Weekly inspections of the container storage areas, K069 container storage area, and the 90-day nickel-cadmium batteries in drums are performed. The inspection form (provided in the Inspection Plan, Appendix 5) includes the inspection of specific items at each hazardous waste unit. First efforts to repair any defect noted during the inspection will be made as soon as possible, but no later than one working day after detection.

5. The owner or operator shall maintain at the facility a copy of the procedure used to determine that containers with a capacity of 0.46 m<sup>3</sup> or greater, which do not meet applicable DOT regulations as specified in Subsection F of this Section, are not managing hazardous waste in light material service.

**Response**

Exide does not typically handle containers with a capacity of 0.46 m<sup>3</sup> or greater. Exide will comply with this requirement if such a container is handled.

**D. Container Level 2 Standards**

1. A container using Container Level 2 controls is one of the following:
  - a. a container that meets the applicable DOT regulations on packaging hazardous materials for transportation, as specified in Subsection F of this Section;

- b. a container that operates with no detectable organic emissions as defined in LAC 33:V.4721 and determined in accordance with the procedure specified in Subsection G of this Section;
- c. a container that has been demonstrated within the preceding 12 months to be vapor-tight by using 40 CFR part 60, appendix A, Method 27 in accordance with the procedure specified in Subsection H of this Section.

**Response**

Exide has no containers using Level 2 control; therefore, this section is not currently applicable. Exide acknowledges, understands and will comply with this requirement if containers are used that require Level 2 controls.

- 2. Transfer of hazardous waste in or out of a container using Container Level 2 controls shall be conducted in such a manner as to minimize exposure of the hazardous waste to the atmosphere, to the extent practical, considering the physical properties of the hazardous waste and good engineering and safety practices for handling flammable, ignitable, explosive, reactive, or other hazardous materials. Examples of container loading procedures that the EPA considers to meet the requirements of this Paragraph include using any one of the following: a submerged-fill pipe or other submerged-fill method to load liquids into the container, a vapor-balancing system or a vapor-recovery system to collect and control the vapors displaced from the container during filling operations, or a fitted opening in the top of a container through which the hazardous waste is filled and subsequently purging the transfer line before removing it from the container opening.

**Response**

Exide has no containers using Level 2 control; therefore, this section is not currently applicable. Exide acknowledges, understands and will comply with this requirement if containers are used that require Level 2 controls.

- 3. Whenever a hazardous waste is in a container using Container Level 2 controls, the owner or operator shall install all covers and closure devices for the container and secure and maintain each closure device in the closed position except as follows:

- a. opening of a closure device or cover is allowed for the purpose of adding hazardous waste or other material to the container as follows:**

  - i. in the case when the container is filled to the intended final level in one continuous operation, the owner or operator shall promptly secure the closure devices in the closed position and install the covers, as applicable to the container, upon conclusion of the filling operation;**
  - ii. in the case when discrete quantities or batches of material intermittently are added to the container over a period of time, the owner or operator shall promptly secure the closure devices in the closed position and install covers, as applicable to the container, upon either the container being filled to the intended final level, the completion of a batch loading after which no additional material will be added to the container within 15 minutes, the person performing the loading operation leaving the immediate vicinity of the container, or the shutdown of the process generating the material being added to the container, whichever condition occurs first;**
- b. opening of a closure device or cover is allowed for the purpose of removing hazardous waste from the container as follows:**

  - i. for the purpose of meeting the requirements of this Section an empty container, as defined in LAC 33:V.109, may be open to the atmosphere at any time (i.e., covers and closure devices are not required to be secured in the closed position on an empty container);**
  - ii. in the case when discrete quantities or batches of material are removed from the container but the container does not meet the conditions to be an empty container, as defined in LAC 33:V.109, the**

owner or operator shall promptly secure the closure devices in the closed position and install covers, as applicable to the container, upon the completion of a batch removal after which no additional material will be removed from the container within 15 minutes or the person performing the unloading operation leaves the immediate vicinity of the container, whichever condition occurs first;

- c. opening of a closure device or cover is allowed when access inside the container is needed to perform routine activities other than transfer of hazardous waste. Examples of such activities include those times when a worker needs to open a port to measure the depth of or sample the material in the container or when a worker needs to open a manhole hatch to access equipment inside the container. Following completion of the activity the owner or operator shall promptly secure the closure device in the closed position or reinstall the cover, as applicable to the container;
- d. opening of a spring-loaded, pressure-vacuum relief valve, conservation vent, or similar type of pressure relief device that vents to the atmosphere is allowed during normal operations for the purpose of maintaining the internal pressure of the container in accordance with the container design specifications. The device shall be designed to operate with no detectable organic emission when the device is secured in the closed position. The settings at which the device opens shall be established such that the device remains in the closed position whenever the internal pressure of the container is within the internal pressure operating range determined by the owner or operator based on container manufacturer recommendations, applicable regulations, fire protection and prevention codes, standard engineering codes and practices, or other requirements for the safe handling of flammable, ignitable, explosive, reactive, or hazardous materials. Examples of normal operating conditions that may require these devices to open are during those times when the internal pressure of the container exceeds the internal pressure operating range for the container as a result of loading operations or diurnal ambient temperature fluctuations;

- e. opening of a safety device, as defined in LAC 33:V.4721, is allowed at any time conditions require doing so to avoid an unsafe condition.

**Response**

Exide has no containers using Level 2 control; therefore, this section is not currently applicable. Exide acknowledges, understands and will comply with this requirement if containers are used that require Level 2 controls.

- 4. The owner or operator of containers using Container Level 2 controls shall inspect the containers and their covers and closure devices as follows:
  - a. in the case when a hazardous waste already is in the container at the time the owner or operator first accepts possession of the container at the facility and the container is not emptied within 24 hours after the container is accepted at the facility (i.e., does not meet the conditions for an empty container as specified in LAC 33:V.109), the owner or operator shall visually inspect the container and its cover and closure devices to check for visible cracks, holes, gaps, or other open spaces into the interior of the container when the cover and closure devices are secured in the closed position. The container visual inspection shall be conducted on or before the date that the container is accepted at the facility (i.e., the date the container becomes subject to the LAC 33:V.Chapter 17.Subchapter C container standards of this Section). For purposes of this requirement, the date of acceptance is the date of signature that the facility owner or operator enters on Item 20 of the Uniform Hazardous Waste Manifest (EPA Forms 8700-22 and 8700-22A, DEQ Form HW-3), as required under LAC 33:V.905. If a defect is detected, the owner or operator shall repair the defect in accordance with the requirements of Subsection D.4.c of this Section;
  - b. in the case when a container used for managing hazardous waste remains at the facility for a period of one year or more, the owner or operator shall visually inspect the container and its cover and closure devices initially and, thereafter, at least once every 12 months, to

check for visible cracks, holes, gaps, or other open spaces into the interior of the container when the cover and closure devices are secured in the closed position. If a defect is detected, the owner or operator shall repair the defect in accordance with the requirements of Subsection D.4.c of this Section;

- c. when a defect is detected for the container, cover, or closure devices, the owner or operator shall make first efforts at repair of the defect no later than 24 hours after detection, and repair shall be completed as soon as possible, but no later than five calendar days, after detection. If repair of a defect cannot be completed within five calendar days, then the hazardous waste shall be removed from the container and the container shall not be used to manage hazardous waste until the defect is repaired.

**Response**

Exide has no containers using Level 2 control; therefore, this section is not currently applicable. Exide acknowledges, understands and will comply with this requirement if containers are used that require Level 2 controls.

**E. Container Level 3 Standards**

1. A container using Container Level 3 controls is one of the following:
  - a. a container that is vented directly through a closed-vent system to a control device in accordance with the requirements of Subsection E.2.b of this Section;
  - b. a container that is vented inside an enclosure that is exhausted through a closed-vent system to a control device in accordance with the requirements of Subsection E.2.a and b of this Section.

**Response**

Exide has no containers using Level 3 control; therefore, this section is not currently applicable. Exide acknowledges, understands and will comply with this requirement if containers are used that require Level 3 controls.



2. The owner or operator shall meet the following requirements, as applicable to the type of air emission control equipment selected by the owner or operator:

- a. the container enclosure shall be designed and operated in accordance with the criteria for a permanent total enclosure as specified in Procedure T—Criteria for and Verification of a Permanent or Temporary Total Enclosure under 40 CFR 52.741, appendix B. The enclosure may have permanent or temporary openings to allow worker access, passage of containers through the enclosure by conveyor or other mechanical means, entry of permanent mechanical or electrical equipment, or direct airflow into the enclosure. The owner or operator shall perform the verification procedure for the enclosure as specified in section 5.0 to Procedure T—Criteria for and Verification of a Permanent or Temporary Total Enclosure initially when the enclosure is first installed and, thereafter, annually; and
- b. the closed-vent system and control device shall be designed and operated in accordance with the requirements of LAC 33:V.1761.

**Response**

Exide has no containers using Level 3 control; therefore, this section is not currently applicable. Exide acknowledges, understands and will comply with this requirement if containers are used that require Level 3 controls.

3. Safety devices, as defined in LAC 33:V.4721, may be installed and operated as necessary on any container, enclosure, closed-vent system, or control device used to comply with the requirements of Subsection E.1 of this Section.

**Response**

Exide has no containers using Level 3 control; therefore, this section is not currently applicable. Exide acknowledges, understands and will comply with this requirement if containers are used that require Level 3 controls.

4. Owners and operators using Container Level 3 controls in accordance with the provisions of this Subchapter shall

inspect and monitor the closed-vent systems and control devices as specified in LAC 33:V.1761.

**Response**

Exide has no containers using Level 3 control; therefore, this section is not currently applicable. Exide acknowledges, understands and will comply with this requirement if containers are used that require Level 3 controls.

5. **Owners and operators that use Container Level 3 controls in accordance with the provisions of this Subchapter shall prepare and maintain the records specified in LAC 33:V.1765.D.**

**Response**

Exide has no containers using Level 3 control; therefore, this section is not currently applicable. Exide acknowledges, understands and will comply with this requirement if containers are used that require Level 3 controls.

6. **Transfer of hazardous waste in or out of a container using container level 3 controls shall be conducted in such a manner as to minimize exposure of the hazardous waste to the atmosphere, to the extent practical, considering the physical properties of the hazardous waste and good engineering and safety practices for handling flammable, ignitable, explosive, reactive, or other hazardous materials. Examples of container loading procedures that the department considers to meet the requirements of this Paragraph include using any one of the following: a submerged-fill pipe or other submerged-fill method to load liquids into the container; a vapor-balancing system or a vapor-recovery system to collect and control the vapors displaced from the container during filling operations; or a fitted opening in the top of a container through which the hazardous waste is filled and subsequently purging the transfer line before removing it from the container opening.**

**Response**

Exide has no containers using Level 3 control; therefore, this section is not currently applicable. Exide acknowledges, understands and will comply with this requirement if containers are used that require Level 3 controls.

- F. **For the purpose of compliance with Subsection C.1.a or D.1.a of this Section, containers shall be used that meet the applicable DOT regulations on packaging hazardous materials for transportation as follows:**

1. the container meets the applicable requirements specified in 49 CFR part 178—Specifications for Packaging or 49 CFR part 179—Specifications for Tank Cars;

**Response**

Exide acknowledges, understands and will comply with this requirement. Only DOT-approved 55-gallon drums are used for waste storage.

2. hazardous waste is managed in the container in accordance with the applicable requirements specified in 49 CFR part 107, subpart B—Exemptions; 49 CFR part 172—Hazardous Materials Table, Special Provisions, Hazardous Materials Communications, Emergency Response Information, and Training Requirements; 49 CFR part 173—Shippers—General Requirements for Shipments and Packages; and 49 CFR part 180—Continuing Qualification and Maintenance of Packagings;

**Response**

Exide acknowledges, understands and will comply with this requirement.

3. for the purpose of complying with this Subchapter, no exceptions to the 49 CFR part 178 or part 179 regulations are allowed except as provided for in Subsection F.4 of this Section; and

**Response**

Exide acknowledges, understands and will comply with this requirement.

4. for a lab pack that is managed in accordance with the requirements of 49 CFR part 178 for the purpose of complying with this Subchapter, an owner or operator may comply with the exceptions for combination packagings specified in 49 CFR 173.12(b).

**Response**

Exide acknowledges, understands, and will comply with this requirement.

- G. To determine compliance with the detectable organic emissions requirement of Subsection D.1.b of this Section, the procedure specified in LAC 33:V.1753.D shall be used.**

- 1. Each potential leak interface (i.e., a location where organic vapor leakage could occur) on the container, its cover, and associated closure devices, as applicable to the container, shall be checked. Potential leak interfaces that are associated with containers include, but are not limited to, the interface of the cover rim and the container wall, the periphery of any opening on the container or container cover and its associated closure device, and the sealing seat interface on a spring-loaded pressure-relief valve.**

**Response**

Subsection D.1.b pertaining to Level 2 control is not applicable; therefore, this section is not applicable.

- 2. The test shall be performed when the container is filled with a material having a volatile organic concentration representative of the range of volatile organic concentrations for the hazardous wastes expected to be managed in this type of container. During the test, the container cover and closure devices shall be secured in the closed position.**

**Response**

Subsection D.1.b pertaining to Level 2 control is not applicable; therefore, this section is not applicable.

- H. The owner or operator shall use the procedure for determining a container to be vapor-tight using Method 27 of 40 CFR part 60, appendix A for the purpose of complying with Subsection D.1.c of this Section.**

- 1. The test shall be performed in accordance with Method 27 of 40 CFR part 60, appendix A.**

**Response**

Subsection D.1.c pertaining to Level 2 control is not applicable; therefore, this section is not applicable.

- 2. A pressure measurement device shall be used that has a precision of  $\pm 2.5$  mm water and that is capable of measuring**

above the pressure at which the container is to be tested for vapor tightness.

**Response**

Subsection D.1.c pertaining to Level 2 control is not applicable; therefore, this section is not applicable.

3. If the test results determined by Method 27 indicate that the container sustains a pressure change less than or equal to 750 Pascals within five minutes after it is pressurized to a minimum of 4,500 Pascals, then the container is determined to be vapor-tight.

**Response**

Subsection D.1.c pertaining to Level 2 control is not applicable; therefore, this section is not applicable.

**§1761. Standards: Closed-Vent Systems and Control Devices**

- A. This Section applies to each closed-vent system and control device installed and operated by the owner or operator to control air emissions in accordance with standards of this Subchapter.

**Response**

Exide does not operate a closed-vent system or control device to control air emissions in accordance with the standards of this subchapter.

- B. The closed-vent system shall meet the following requirements:
  1. shall route the gases, vapors, and fumes emitted from the hazardous waste in the waste management unit to a control device that meets the requirements specified in Subsection C of this Section;
  2. shall be designed and operated in accordance with the requirements specified in LAC 33:V.1709.K;
  3. in the case when the closed-vent system includes bypass devices that could be used to divert the gas or vapor stream to the atmosphere before entering the control device, each

**RESPONSE  
ATTACHMENT 18**

# **CHAPTER 18**

## **CONTAINMENT BUILDINGS**

**Title 33**  
**ENVIRONMENTAL QUALITY**  
**Part V. Hazardous Waste and Hazardous Materials**  
**Subpart 1. Department of Environmental Quality – Hazardous Waste**

**Chapter 18. Containment Buildings**

**§1801. Applicability**

A. The requirements of this Section apply to owners or operators who store or treat hazardous waste in units designed and operated under LAC 33:V.1802. These provisions became effective on February 18, 1993, although an owner or operator may have notified EPA or the administrative authority of his intent to be bound by this Section or its federal equivalent at an earlier time. The owner or operator is not subject to the definition of land disposal in LAC 33:V.2203 or R.S. 30:2193 provided that the unit:

1. is a completely enclosed, self-supporting structure that is designed and constructed of manmade materials of sufficient strength and thickness to support themselves, the waste contents, and any personnel and heavy equipment that operate within the unit, and to prevent failure due to pressure gradients, settlement, compression, uplift, physical contact with the hazardous wastes to which they are exposed, climatic conditions, and the stresses of daily operation, including the movement of heavy equipment within the unit and contact of such equipment with containment walls;

**Response**

The Containment Building is a self-supporting structure, completely enclosed with a floor, a roof, and walls designed to reduce the potential for lead particles to escape the building. The ventilation system for point sources within the Containment Building provides a constant inward air flow at these openings, thereby minimizing the potential for fugitive emissions from the building openings.

**Maximum Storage**

The Containment Building has a maximum capacity of 3,333 tons of blast furnace slag and 12,080 tons of lead material for recycling, including battery plates, lead oxide paste, reverberatory furnace slag, lead dross and purchased scrap. Pastes stored in Area 1 do not contain free liquids and do not have the potential to contain free liquids. The following calculations were obtained from the Closure Cost Estimate in Appendix 8. The



production/operation area (Area 3) is not used for hazardous waste storage.

#### Maximum slag quantity

(Area 1) Slag Area 1:  $100 \text{ ft} \times 25 \text{ ft} \times 10 \text{ ft} = 25,000 \text{ cf}$   
 $25,000 \text{ cf} / 27 = 925.93 \text{ cy}$   
 $925.93 \text{ cy} \times 1.3 \text{ tons/cy}$   
 $= 1,204 \text{ tons (assume 1,333 tons)}$   
(Area 1) Slag Area 2:  $77 \text{ ft} \times 45 \text{ ft} \times 12 \text{ ft} = 41,580 \text{ cf}$   
 $41,580 \text{ cf} / 27 = 1,540 \text{ cy}$   
 $1,540 \text{ cy} \times 1.3 \text{ tons/cy} = 2,000 \text{ tons}$   
Total slag =  $1,333 + 2,000 = 3,333 \text{ tons}$

#### Other Material Quantities

(Area 2) Paste Storage Area 3:  $95 \text{ ft} \times 80 \text{ ft} \times 12 \text{ ft} = 91,200 \text{ cf}$   
 $91,200 \text{ cf} / 27 = 3,377.8 \text{ cy}$   
 $3,377.8 \text{ cy} \times 1.8 \text{ tons/cy} = 6,080 \text{ tons}$   
(Area 1) Dry Paste Area 4:  $50 \text{ ft} \times 50 \text{ ft} \times 12 \text{ ft} = 30,000 \text{ cf}$   
 $30,000 \text{ cf} / 27 = 1,111.11 \text{ cy}$   
 $1,111.11 \text{ cy} \times 1.7 \text{ tons/cy}$   
 $= 1,888 \text{ tons (round to 2,000 tons)}$   
(Area 1) Dry Paste Area 5:  $100 \text{ ft} \times 25 \text{ ft} \times 12 \text{ ft} = 30,000 \text{ cf}$   
 $30,000 \text{ cf} / 27 = 1,111.11 \text{ cy}$   
 $1,111.11 \text{ cy} \times 1.7 \text{ tons/cy}$   
 $= 1,888 \text{ tons (round to 2,000 tons)}$   
(Area 1) Dry Paste Area 6:  $100 \text{ ft} \times 25 \text{ ft} \times 12 \text{ ft} = 30,000 \text{ cf}$   
 $30,000 \text{ cf} / 27 = 1,111.11 \text{ cy}$   
 $1,111.11 \text{ cy} \times 1.7 \text{ tons/cy}$   
 $= 1,888 \text{ tons (round to 2,000 tons)}$   
Total Other Materials =  $12,080 \text{ tons}$

#### Area 1

The Raw Material Storage Area (Area 1) was constructed in 1991. Area 1 is used for storage of battery plates, dry lead oxide paste, reverberatory furnace slag, lead dross and purchased iron scrap. Purchased iron scrap is used as furnace feed material. Exide does not recycle scrap metal. In 1992 Woodward-Clyde Consultants (WCC) submitted a professional engineer's certification document demonstrating that the design and construction of the building base in the Raw Material Storage

Area/Dross Bin was in "substantial conformance with the plans developed for this project". The Containment Building Certification Document and available structural information are included as Appendix 11. LDEQ has not yet approved the certification. Additionally, this building has adequately handled operations similar to its current operation for over ten years.

The floors, walls, and roof of Area 1 are the primary barrier system. The primary barrier system is constructed of man-made materials designed to withstand the movement of and contact with personnel, waste, and handling equipment during the operating life of the unit and are appropriate for the physical and chemical characteristics of the lead bearing materials to be managed. Sketches of the floor construction in the storage area (Area 1) are included with the professional engineer's certification documents in Appendix 11. The floor system includes, from top to bottom, 6 inches concrete, Amoco 4516 geotextile, 40 mil HDPE geomembrane, and 1 inch sand over existing concrete. The geomembrane is attached to the concrete with a stainless steel batton bar, bolts, double neoprene gasket and caulking. The strength of the concrete is not known as the original design documents are not available. The reinforced concrete walls of Area 1 are 12 feet high and 1 foot thick. The quantity and size of reinforcing steel and the concrete strength are not known as the original design data for the building is not available.

The greatest load on the floor system in Area 1 would occur when Slag Storage Area 2 is at maximum capacity. For conservatism, a higher unit weight has been assigned to the slag for this calculation. The floor integrity calculations are as follows:

$77 \text{ ft} \times 45 \text{ ft} = 3,465 \text{ sf} \times 144 = 498,960 \text{ si}$   
Maximum capacity =  $77 \text{ ft} \times 45 \text{ ft} \times 12 \text{ ft} = 41,580 \text{ cf}$   
 $41,580 \text{ cf} \times 205 \text{ lb/cf} = 8,523,900 \text{ lbs at maximum capacity}$   
Weight of front-end loader = 24,000 lbs  
Weight of 55 personnel =  $55 \times 200 \text{ lbs} = 11,000 \text{ lbs}$   
 $8,523,900 \text{ lbs} + 24,000 \text{ lbs} + 11,000 \text{ lbs} = 8,558,900 \text{ lbs}$   
Maximum load =  $8,558,900 \text{ lbs} / 498,960 \text{ si} = 17.15 \text{ psi}$

In order to support operations, the concrete strength at Area 1 of the Containment Building would need to be a minimum of 17.15 psi. As concrete has a typical strength of 3,000 to 4,000 psi, the concrete floor is capable of supporting the anticipated loads when properly reinforced and constructed on an adequately prepared subgrade.

Design calculations for the Containment Building walls and information regarding the size and quantity of reinforcing steel could not be located as part of the Part B Permit renewal process. Qualitatively it is obvious that the reinforced concrete walls for the structure provide adequate strength based on the observation that the walls have been functioning since their construction over 10 years ago. The ultimate limit state of the Containment Building walls would be failure by flexure (moment) and shear. No excessive movement or cracking has been observed that would suggest either failure mechanism is occurring.

To substantiate the qualitative observation that the strength of the walls is adequate, a simplified quantitative evaluation for shear stress was performed. For evaluation purposes, the exterior walls are considered as unit lengths with a fixed end at the ground surface and unsupported at the top of the wall, relying on the inherent strength of the walls to resist shear from the applied loads. As shown in the attached calculations, shear forces imposed by the lateral loads from the materials contained in the building are easily handled (F.S.= 1.7) by the resistance developed in the reinforced wall. Calculations are provided in Appendix 22.

For the moment, the building relies on a combination of the inherent strength of the reinforced wall and frame action provided by the building columns. Approximately half of the stress is accommodated by the wall strength with the remainder of the stress being transferred to the building frame. Unlike shear, a simplified quantitative evaluation for flexure could not be completed utilizing the information available, although as stated earlier, no visual observations were made that indicate that the building has not been adequate for the service loads experienced during the last 10 years of operation.

## Area 2

The Paste Storage Area (Area 2) is used for the initial staging of neutralized lead paste from the battery breaking/desulfurization process prior to moving the paste to Area 1. As previously stated, the paste stored in Area 2 is a high-density, solid reddish-brown material with a moisture content of less than 5 percent that has the potential to contain free liquids. Due to the potential to contain free liquids, Exide submitted plans on October 17, 2001 to upgrade Area 2 to meet the requirements of this chapter. While approval of the permit modification has not yet been received, LDEQ has approved construction of the upgrades as shown in

Appendix 23. The upgrades occurred in November 2003. Details of the proposed upgrades are provided in Appendix 25. The certification report for the floor upgrades is provided in Appendix 11C. The previous conditions of Area 2 are presented in the Containment Building Certification Document in Appendix 11A and 11B as the Battery Plate Storage Area.

The floors, walls and roof of Area 2 act as the primary barrier. The reinforced walls of Area 2 are 12 feet high and one foot thick. The type and quantity of reinforcement and the strength of the concrete are not known as original design information is not available.

The upgrade renovated the floor system to ensure that it is designed and constructed of materials of sufficient strength and thickness to support itself, the waste contents, any personnel and heavy equipment that operate within the unit, and to prevent failure due to pressure gradients, settlement, compression, uplift, physical contact with the hazardous waste to which it is exposed, climatic conditions, and the stresses of daily operation, including the movement of heavy equipment within the unit and contact of such equipment with containment walls. The professional engineer's certification for Area 2 is provided in Appendix 11C. Existing asphalt was removed and the concrete surface prepared for installation of new barrier and drainage layers. The upgraded floor system for Area 2 is, from top to bottom, acid brick, minimum of 6 inches 4,000 psi reinforced concrete, 12 ounce geotextile, 80 mil HDPE geomembrane, and geonet drainage layer, overlying the existing system of 4 inches concrete, limestone gravel, 2 inch Schedule 40 PVC piping with 3/8 inch perforations, 1.5 inches asphalt and 4 inches concrete. The concrete was reinforced with #5 rebar at 12 inches on center in each direction. All joints were covered with corrosive resistant tape. Concrete was mixed and placed in accordance with ACI standards. The geomembrane was attached to the existing concrete wall with a stainless steel baton bar, bolts, and neoprene gaskets. Drawings showing the proposed upgrades are provided in Appendix 25. The certification report, including as-builts, is provided in Appendix 11C.

Wall strength calculations for Area 2 are the same as wall strength calculations for Area 1. Please refer to calculations presented in the response to LAC 33:V.1801.1 regarding Area 1 for an evaluation of Containment Building wall strength.

2. **has a primary barrier that is designed to be sufficiently durable to withstand the movement of personnel, wastes, and handling equipment within the unit;**

**Response**

Based on the calculations provided in the response to LAC 33.V:1801.1, the primary barrier system (floors, walls and roof) of Area 1 (6 inches concrete, Amoco 4516 geotextile, and 40 mil HDPE geomembrane) and Area 2 (acid brick, minimum of 6 inches 4,000 psi reinforced concrete, 12 ounce geotextile, and 80 mil HDPE geomembrane) of Exide's Containment Building are capable of withstanding the movement of personnel, waste, and handling equipment within the unit during the operating life of the unit and are appropriate for the physical and chemical characteristics of the lead bearing materials to be managed on the primary barrier.

3. **when used to manage liquids:**
  - a. **has a primary barrier designed and constructed of materials to prevent migration of hazardous constituents into the barrier;**

**Response**

The Containment Building has an efficient primary barrier designed and constructed to prevent the migration of any hazardous constituents into the barrier. Migration of waste is prevented by the primary barrier, which consists of 6 inches of concrete and HDPE geomembrane. These materials have a very low permeability and prevent liquids from moving vertically. The floors are sloped to collection points to facilitate removal of liquids which are intercepted by the primary barrier.

Area 1 manages wastes without free liquids; but will utilize small amounts of water for the purpose of dust suppression. However, this activity should not generate any free standing liquids and this citation does not apply to this area. The floor system of Area 1 is constructed of concrete and geomembrane and is sloped to collection points to facilitate removal of wastes from the primary barrier to prevent migration of hazardous constituents into the barrier. The drainage pattern for the Area 1 floor is shown on sketches in Appendix 11.

Area 2 will be used to manage free liquids. The upgrades for this area included a sloped primary barrier consisting of acid brick, a minimum of 6 inches of concrete, and a HDPE liner. The sloped floor and the materials of construction facilitate collection and removal of wastes from the floor and prevent migration of hazardous constituents. Floor slopes are shown on the design drawings provided in Appendix 25 and as-built drawings provided in Appendix 11.

- b. has a liquid collection system designed and constructed of materials to minimize the accumulation of liquid on the primary barrier; and**

**Response**

Area 1 is not required to have a liquid collection system as liquids are not managed in the area.

The Area 2 floor system was upgraded to acid brick, concrete, and HDPE geomembrane as shown in Appendix 25 and Appendix 11C. Drainage from the primary barrier system in Area 2 is directed to sumps to minimize the accumulation of free liquids on the primary barrier. Sloped floors facilitate the collection of liquids for removal. The liquids collected at the sumps are pumped from the sump and transferred to the facility wastewater treatment plant.

- c. has a secondary containment system designed and constructed of materials to prevent migration of hazardous constituents into the barrier, with a leak detection and liquid collection system capable of detecting, collecting, and removing leaks of hazardous constituents at the earliest practicable time, unless the unit has been granted a variance from the secondary containment system requirements under LAC 33:V.1802.B.4;**

**Response**

As Area 1 does not manage free liquids, a leak detection and liquid collection system is not required.

Beneath the primary barrier in Area 2 is a secondary containment system designed with a leak detection and liquid collection system capable of detecting, collecting, and removing hazardous constituents at the earliest practicable time. The leak detection and liquid collection

system consists of a geonet drainage layer beneath the geomembrane. The secondary containment system underlying the drainage layer is the prepared surface of the existing 4 inch thick concrete. Remaining components of the former floor system including limestone gravel, perforated PVC pipes, asphalt and concrete will not be utilized as leak detection or barrier layers, but will be allowed to remain in-place. Drawings of this design are included in Appendix 25. As-built drawings are provided in Appendix 11C.

4. **has controls as needed to permit fugitive dust emissions to meet the no visible emission standard in LAC 33:V.1802.C.1.d; and**

**Response**

Exide has measures in place to control fugitive dust emissions such that any openings (doors, windows, vents, cracks, etc.) exhibit no visible emissions (according to 40 CFR Part 60 Appendix A, Visual Determination of Fugitive Emissions from Material Sources and Smoke Emissions from Flares). In addition, all associated particulate collection devices (e.g., fabric filter, electrostatic precipitator) will be operated and maintained with sound air pollution control practices. Exide maintains a state of no visible emissions at all times during normal operating and maintenance conditions, including when vehicles and personnel are entering and exiting the Containment Building. Exide's Containment Building is operated with a ventilation system to permitted point sources as shown on Figure 10. This ventilation system provides inward air flow (negative pressure) on the building. In addition, liquids are occasionally used on the lead bearing materials within the building for dust suppression purposes. These controls are used to ensure that no visible emissions are emitted from the Containment Building.

5. **has been designed and is operated to ensure containment and prevent the tracking of materials from the unit by personnel or equipment.**

**Response**

Access areas to the Containment Building are limited. As shown on Figure 6, vehicle wash stations are positioned at the main entrances to the Containment Building to ensure the containment of wastes within the building. All vehicles exiting the building are required to use the vehicle washes to remove any accumulated waste prior to departure from the building. All water from the

vehicle wash area is routed to the on-site wastewater treatment system.

The potential for personnel tracking of materials from the Containment Building to the outer lying areas is minimized through the use of personnel wash areas located in select access areas of the building. In addition, all contaminated clothing is removed and contained for proper handling. Spent PPE is recycled in the furnace or disposed off-site at a permitted facility.

## **§1802. Design and Operating Standards**

### **A. All Containment Buildings must comply with the following design standards:**

- 1. the Containment Building must be completely enclosed with a floor, walls, and a roof to prevent exposure to the elements, (e.g., precipitation, wind, run-on) and to ensure containment of managed wastes;**

#### **Response**

Exide's Containment Building is completely enclosed with floors, walls (primary barrier system) and a roof with minimal pathways necessary to accommodate operations. These pathways provide limited access for personnel and for the loading/unloading of material. These areas will remain closed when not in use. The ventilation system for the Containment Building keeps a constant inward air flow (negative pressure) on these openings, which minimizes the potential for any fugitive emissions. These controls prevent the exposure to the elements and controls the containment of the lead bearing materials.

- 2. the floor and containment walls of the unit, including the secondary containment system if required under LAC 33:V.1802.B, must be designed and constructed of materials of sufficient strength and thickness to support themselves, the waste contents, and any personnel and heavy equipment that operate within the unit and to prevent failure due to pressure gradients, settlement, compression, uplift, physical contact with the hazardous wastes to which they are exposed, climatic conditions, and the stresses of daily operation, including the movement of heavy equipment within the unit and contact of such equipment with containment walls. The unit must be designed so that it has sufficient structural strength to prevent collapse or other failure. All surfaces to be in contact with hazardous wastes must be chemically compatible with those wastes. The**



**§1803. Closure and Post-closure Care**

- A. At closure of a Containment Building, the owner or operator must remove or decontaminate all waste residues, contaminated containment system components (liners, etc.), contaminated subsoils, and structures and equipment contaminated with waste and leachate and manage them as hazardous waste unless LAC 33:V.109.Hazardous Waste applies. The closure plan, closure activities, cost estimates for closure, and financial responsibility for Containment Buildings must meet all of the requirements specified in LAC 33:V.Chapters 35 and 37.**
- B. If, after removing or decontaminating all residues and making all reasonable efforts to effect removal or decontamination of contaminated components, subsoils, structures, and equipment as required in Subsection A of this section, the owner or operator finds that not all contaminated subsoils can be practicably removed or decontaminated, he must either:**
- 1. close the facility and perform post-closure care in accordance with the closure and post-closure requirements that apply to landfills (LAC 33:V.2521). In addition, for the purposes of closure, post-closure, and financial responsibility, such a Containment Building is then considered to be a landfill and the owner or operator must meet all of the requirements for landfills specified in LAC 33:V.Chapters 35 and 37; or**
  - 2. perform a risk assessment to demonstrate that closure with the remaining contaminant levels in protective of human health and the environment in accordance with LAC 33:V. Chapter 13. Any such risk assessment is subject to approval by the administrative authority and must demonstrate that post-closure care is not necessary to adequately protect human health and the environment.**

**Response**

Exide acknowledges these citations and will comply. Closure for the Containment Building is addressed in Appendix 8, Closure and Post Closure Plan. The Closure and Post Closure Plan includes general closure procedures; specific closure procedures for the slag stabilization area, the Containment Building, the K069/D008 Storage Area, the Truck Trailer Storage area, and the Whole Battery storage area; a closure cost estimate and post-closure care procedures.

Slag remaining in the Containment Building at closure will be loaded into lined end dump trailers for transport to an off-site permitted hazardous waste disposal site. Battery components and other lead-bearing materials remaining in the Containment Building at closure will be loaded into vehicles for transport to another lead smelter for recycling. A sweeper truck will be used to clean any residual material. The walls and floor of the Containment Building will be decontaminated with steam cleaners. Equipment used for loading and sweeping will also be decontaminated. Wash water will be collected in trailers and transported for off-site disposal. Samples of the wash water will be collected to determine if the decontamination process is complete. Confirmation samples will be collected by drilling through the concrete and collecting soil samples for analysis. A certification report stating that the Containment Building was closed in accordance with the approved closure plan will be prepared by an independent registered professional engineer.

**RESPONSE  
ATTACHMENT 21**

## **CHAPTER 21**

## **CONTAINERS**

**Title 33**  
**ENVIRONMENTAL QUALITY**  
**Part V. Hazardous Waste and Hazardous Materials**

**Chapter 21. Containers**

**§2101. Applicability**

The regulations in this Chapter apply to owners and operators of all hazardous waste facilities that store containers of hazardous waste, except as specified in LAC 33:V.1501, or if the container is empty (see LAC 33:V.109).

**Response**

Exide understands that the requirements of this chapter apply as Exide stores hazardous waste in containers (55-gallon drums). Exide uses 55-gallon drums for storage of lead-bearing materials (D008) and baghouse dust (K069) at the K069/D008 storage area. Spent nickel-cadmium batteries are also stored in drums in a trailer at the Truck/Trailer Storage Area prior to shipment off-site. Exide also stores spent lead acid batteries on pallets at the Truck/Trailer Storage Area and the Whole Battery Storage Area. As they contain acid, the batteries are considered containers until broken in the battery breaker.

The K069/D008 storage area has a maximum storage capacity of 544 55-gallon drums (29,920 gallons) calculated in the Closure Cost Estimate (Appendix 8) as follows:

Area = 25 ft by 70 ft

17 pallets per row x 2 pallets high x 4 drums per pallet = 136 drums per row

4 rows (3 aisles with no more than 1 row between aisles) x 136 drums per row = 544 drums maximum storage capacity.

544 drums x 55 gallons per drum = 29,920 gallons

The Truck/Trailer Storage Area has a maximum storage capacity of 85,000 batteries (85,000 gallons) calculated as follows. The maximum height of pallets and batteries is 8 feet.

Area = 120 ft by 120 ft

36 trailers x 2,361 batteries per trailer = 85,000 batteries

85,000 batteries x 1 gallon per battery = 85,000 gallons

The Whole Battery Storage Area has a maximum storage capacity of 121,500 batteries (121,500 gallons) calculated in the Closure Cost Estimate (Appendix 8) as follows. The maximum height of pallets and batteries is 8 feet.

Area = 75 ft by 160 ft

18 pallets per row x 3 pallets high x 75 batteries per pallet

= 4,050 batteries per row

30 rows (15 aisles with no more than 2 rows between aisles) x 4,050 batteries per row = 121,500 batteries

121,500 batteries x 1 gallon per battery = 121,500 gallons.

- A. Containers not exempted from these regulations shall be considered hazardous and shall be disposed of or treated by an acceptable waste disposal or treatment method.**

**Response**

Exide understands this citation and will comply.

- B. If a hazardous waste is emptied from a container, the residue remaining in the container is not considered a hazardous waste if the container is empty as defined in LAC 33:V.109. In that event, management of the container is exempt from the requirements of this Chapter.**

**Response**

Exide understands this citation and will comply.

- C. Empty containers sent to a reclaimer are considered product, and thus are not subject to these rules and regulations. Residue from the reclaimer's operations must be disposed of in a permitted facility.**

### **Response**

Exide understands this citation and will comply. After dumping the material contents from the drum, Exide washes and crushes each drum prior to sending the crushed drums off-site for recycling. Solid materials from the cleaning process are collected and placed in the feed piles with similar materials. Wash water is collected and processed in the facility's Waste Water Treatment Plant. Broken batteries are reclaimed as part of the recycling process and truck trailers are re-used for transport and storage of spent batteries.

- D. The storage of hazardous waste prohibited from land disposal must also be in accordance with the requirements of LAC 33:V.2205.**

### **Response**

Exide understands this citation and will comply.

## **§2103. Condition of Containers**

- A. If a container holding hazardous waste is not in good condition (e.g., severe rusting, apparent structural defects) or if it begins to leak, the owner or operator must transfer the hazardous waste from this container to a container that is in good condition or manage the waste in some other way that complies with the requirements of this Chapter.**

### **Response**

Exide understands this citation and will comply. If a container (55-gallon drum or battery) holding hazardous waste is not in good condition or if it begins to leak, the waste will be transferred to the feed piles for reclaim or the waste will be transferred to a 55-gallon drum that is in good condition. Exide conducts weekly inspections of all storage areas for integrity and leaks in accordance with the Inspection Plan in Appendix 5.

## **§2105. Compatibility of Waste with Containers**

- A. The owner or operator must use a container made of or lined with materials which will not react with, or be incompatible with, the hazardous waste to be stored, so that the ability of the container to contain the waste is not impaired.**

### **Response**

Exide understands this citation and will comply. Exide only uses containers made or lined with materials which will not react with, or be incompatible with, the hazardous waste to be stored.

## **§2107. Management of Containers**

- A. A container holding hazardous waste must always be closed during storage, except when it is necessary to add or remove waste.**

### **Response**

Exide understands the requirements of this citation and will comply. Drums holding hazardous waste are stored with lids on, except when it is necessary to add or remove waste. Trailers storing spent batteries are maintained with doors closed, except when it is necessary to add or remove waste. Weekly inspections of the container storage areas are performed. The inspections are noted on an inspection form. An example inspection form has been included with the Inspection Plan in Appendix 5.

- B. A container holding hazardous waste must not be opened, handled, or stored in a manner which may rupture the container or cause it to leak.**

### **Response**

Exide understands this requirement and will comply.

## **§2109. Inspections**

- A. At least weekly, the owner or operator must inspect areas where containers are stored, looking for leaking containers and for deterioration of containers and the containment system. Remedial action as described in LAC 33:V.1513 shall be taken.**

### **Response**

Exide conducts weekly inspections of the container storage areas. Inspection items include leaking containers, deteriorated or open containers and the containment system. The inspections are noted on an



inspection form. An example inspection form has been included with the Inspection Plan in Appendix 5.

- B. All containers must be stacked in such a fashion that each container identification label can be read from the access aisle.**

**Response**

Exide understands this citation and will comply by stacking containers in such a fashion that identification labels can be read from the access aisle. A minimum aisle space of 24 inches is maintained between pallets at the K069/D008 Storage Area and Whole Battery Storage Area. The K069/D008 Storage Area has four single rows of double stacked pallets and three aisles. The Whole Battery Storage Area has 30 rows (15 double rows) of triple stacked pallets and 15 aisles.

Aisle space is not required between the trailers at the Truck/Trailer Storage Area as the trailers act as containment for the batteries. However, for operational purposes, trailers at the Truck/Trailer storage area have adequate space between the trailers to allow for movement of the trailers.

- C. All inspection records must be maintained according to the recordkeeping requirements of LAC 33:V.1529.**

**Response**

Exide understands this citation and will maintain inspection records for at least three years from the date of inspection. The Inspection Plan is provided in Appendix 5.

**§2111. Containment**

- A. Container storage areas must have a containment system that is designed and operated in accordance with LAC 33:V.2111.B except as otherwise provided by LAC 33:V.2111.C.**

**Response**

Exide understands the requirements of this citation and will comply.

The K069/D008 storage area has an asphalt and concrete floor and a 3 inch high asphalt berm for containment. Details of the K069/D008 storage area are provided in Figure 11.

The Truck/Trailer Storage area has an asphalt and concrete floor with a 2.5 foot high asphalt berm for containment. Details of the Truck/Trailer Storage Area are provided in Figure 12.

The Whole Battery Storage Area has an asphalt and concrete floor with a 5 inch high perimeter asphalt berm for containment. Details of the Battery Storage Area are provided on Figure 13.

**B. A containment system must be designed and operated as follows:**

- 1. A base must underlie the containers which is free of cracks or gaps and is sufficiently impervious to contain leaks, spills, and accumulated precipitation until the collected material is detected and removed;**

**Response**

The base of the K069/D008 storage area is, from top to bottom, 4 inches of asphalt, 4 inches of concrete, 1.5 inches of asphalt and 6 inches of concrete as shown on Figure 11.

The base of the Truck/Trailer Storage area is, from top to bottom, 3 inches asphalt and 6 inches concrete, with the exception of the dolly pad (12 inches concrete) and a concrete area (6 inches concrete) as shown on Figure 12.

The base of the Whole Battery Storage Area is, from top to bottom, six (6) inches asphalt and 10 inches of 3,500 psi mesh reinforced concrete as shown on Figure 13.

Concrete and asphalt are sufficiently impervious to contain leaks, spills and accumulated precipitation until the material can be detected and removed. Removed solid materials are transferred to the furnace for reclaim or an intact 55-gallon drum. Any liquid collected in Whole Battery Storage Area sump is pumped to the battery breaker unit for neutralization prior to pumping to the wastewater treatment plant. Removed liquids from the K069/D008 and Truck/Trailer Storage Areas are transferred directly to the facility wastewater treatment system for processing.

Removed liquids at the Truck/Trailer Storage Area could be due to precipitation as free liquids or acid from stored batteries. Liquids at the Whole Battery Storage Area would be due to acid from stored batteries as the area is covered with a roof and precipitation does not enter. Liquids are not expected at the K069/D008 storage area as the area has a roof to prevent precipitation and no wastes with free liquids are stored in the K069/D008 storage area.

2. **the base must be sloped or the containment system must be otherwise designed and operated to drain and remove liquids resulting from leaks, spills, or precipitation, unless the containers are elevated or are otherwise protected from contact with accumulated liquids;**

#### **Response**

As shown on Figure 11, the base of the K069/D008 storage area is sloped to a collection point for ease of removal. The drums are also stored on pallets to prevent contact of the drums with spills. As pallets are 4 inches high, the drums will be maintained above the top of the spill as the berm height is 3 inches. Liquid spills are not anticipated as liquids or materials which contain free liquids are not stored in the K069/D008 storage area and the area is under a roof to prevent precipitation.

As shown on Figure 12, the base of the Truck/Trailer storage area is sloped to a collection point for ease of removal. The drums are stored on pallets in truck trailers to provide additional containment and to elevate the drums above accumulated precipitation.

As shown on Figure 13, the base of the Whole Battery Storage Area is sloped to a sump for removal and is pumped to the battery breaker unit for neutralization prior to pumping to the wastewater treatment plant. Spent batteries are stored on pallets to elevate the batteries above accumulated liquids.

3. **The containment system must have sufficient capacity to contain 10 percent of the volume of containers or the volume of the largest container, whichever is greater. Containers that do not contain free liquids need not be considered in this determination;**

### Response

The drums within the K069/D008 storage area do not contain free liquids or materials containing free liquids; therefore, this requirement does not apply to that area.

The Truck/Trailer Storage Area stores batteries which contain free liquids. The Truck Trailer Storage Area has a maximum storage capacity of 85,000 batteries (i.e., 85,000 gallons). The containment system (i.e., floor and asphalt perimeter berm) was designed to have sufficient capacity to contain a 12 inch (25-year, 24-hour) rainfall event and 10% of the total battery acid stored. Calculations are provided as follows:

$$\begin{aligned}\text{Available Containment Volume} &= 120 \text{ ft} \times 120 \text{ ft} \times 2.5 \text{ ft} \\ &= 36,000 \text{ cf} \\ &= 269,280 \text{ gal} \\ \text{Stormwater to be stored} &= 120 \text{ ft} \times 120 \text{ ft} \times 1 \text{ ft} = 14,400 \text{ cf} \\ &= 107,712 \text{ gal} \\ \text{10\% of total battery acid to be stored} &= 85,000 \text{ gal} \times 0.1 \\ &= 8,500 \text{ gal} \\ \text{Total liquid (stormwater and 10\% of acid) to be stored} &= 107,712 \text{ gal} + 8,500 \text{ gal} = 116,212 \text{ gal}\end{aligned}$$

As the containment volume of 269,280 gallons is greater than the total liquid volume to be stored (116,212 gallons), the containment at the Truck/Trailer Storage Area is acceptable.

The Whole Battery Storage Area stores batteries which contain free liquids. The Whole Battery Storage area has a maximum storage capacity of 121,500 batteries (i.e., 121,500 gallons). The containment system (i.e., floor and asphalt perimeter berm) was designed to contain 10% of acid plus 2 inches freeboard. This area is not required to manage a 12 inch rainfall event as the area has a roof and is constructed to prevent run-on. Calculations are provided as follows:

Available containment volume (5/12) ft	= 75 ft x 160 ft x
	= 5,000 cf
	= 37,400 gal.
Stormwater to be stored	= 0 gal
10% of total battery acid to be stored	= 121,500 gal x 0.1
	= 12,150 gal
Total liquid to be stored	= 12,150 gal

As the containment volume of 37,400 gallons is greater than the total liquid volume to be stored (12,150 gallons), the containment at the Whole Battery Storage Area is acceptable.

4. **Run-on into the containment system must be prevented unless the collection system has sufficient excess capacity in addition to that required in LAC 33:V.2111.B.3 to contain any run-on which might enter the system;**

**Response**

Run-on into the containment system of the K069/D008 storage area, the Truck/Trailer storage area and Whole Battery Storage Area is prevented by the asphalt perimeter berm and the slope of the floor systems.

5. **Spilled or leaked waste and accumulated precipitation must be removed from the sump or collection area in as timely a manner as is necessary to prevent overflow of the collection system; and**

**Response**

Exide acknowledges this requirement and will remove spilled or leaked waste and accumulated precipitation from the collection area in as timely a manner as is necessary to prevent overflow of the collection system.

6. If the collected material is a hazardous waste, it must be managed as a hazardous waste in accordance with all applicable requirements.

**Response**

Exide acknowledges this requirement and, if the collected material is a hazardous waste, will manage the material as a hazardous waste. Solid materials will be reclaimed in the furnace. Liquids will be processed in the facility wastewater treatment plant.

- C. Storage areas that store containers holding only wastes that do not contain free liquids need not have a containment system defined by LAC 33:V.2111.B, except as provided by LAC 33:V.2111.D or provided that:

1. the storage area is sloped or is otherwise designed and operated to drain and remove liquid resulting from precipitation; or

**Response**

The wastes stored in drums at the K069/D008 storage area do not contain free liquids or material containing free liquids and the area has a roof to prevent precipitation; therefore a containment system is not required. The storage area is slope to drain to a collection point.

2. The containers are elevated or are otherwise protected from contact with accumulated liquid.

**Response**

The drums at the K069/D008 storage area and batteries at the Whole Battery Storage Area are stored on pallets to be elevated above accumulated liquid. Drums and batteries at the Truck/Trailer Storage Area are stored on pallets in trailers to be elevated above accumulated liquid.

- D. Storage areas that store containers holding the wastes listed below must have a containment system defined by LAC 33:V.2111.B even when these wastes do not contain free liquids: F020, F021, F022, F023, F026, and F027.**

**Response**

Exide understands the requirements of this citation and will comply; however, it does not apply as Exide does not treat or store F020, F021, F022, F023, F026 or F027 wastes.

**§2113. Special Requirements for Ignitable or Reactive Wastes**

- A. Containers holding ignitable or reactive waste must be located at least 15 meters (50 feet) from the facility property line. (See LAC 33:V.1517 for additional requirements or LAC 33:V.4321 for additional requirements for interim status facilities.)**

**Response**

Exide understands the requirements of this citation and will comply; however, it does not apply as Exide does not manage ignitable or reactive wastes. Exide has a Waste Acceptance program in place that prevents the receipt of ignitable or reactive wastes.

**§2115. Special Requirements for Incompatible Wastes**

- A. Incompatible wastes, or incompatible wastes and materials, must not be placed in the same container unless LAC 33:V.1517 or LAC 33:V.4321 for interim status facilities is complied with.**

**Response**

Exide understands, acknowledges and will comply with this provision. Exide has a Waste Acceptance program in place that prevents the receipt of incompatible wastes. If received, incompatible wastes would be stored in separate containers.

- B. Hazardous wastes must not be placed in an unwashed container that previously held an incompatible waste or material.**

**RESPONSE  
ATTACHMENT 33**



# **CHAPTER 33**

## **GROUND WATER PROTECTION**

**Title 33**  
**ENVIRONMENTAL QUALITY**

**Part V. Hazardous Waste and Hazardous Materials**

**Chapter 33. Ground Water Protection**

**§3301. Applicability**

- A. Except as provided in LAC 33:V.3301.C, the regulations in this Chapter apply to owners or operators of facilities that treat, store or dispose of hazardous waste. The owner or operator must satisfy the requirements identified in LAC 33:V.3301.B for all wastes (or constituents thereof) contained in solid waste management units at the facility, regardless of the time at which waste was placed in such units.

**Response**

Exide acknowledges the requirements of this citation and will comply. The regulations of this chapter apply to the Baton Rouge smelter as the facility treats and stores hazardous waste. The facility maintains two closed hazardous waste piles under the Post-Closure permit LAD 008 184 137 effective June 19, 1995. The piles were closed in-place in 1985 and 1986. A post-closure groundwater monitoring plan is in-place for these piles. The facility also has several regulated units including the Truck/Trailer storage area, the Whole Battery Storage Area, the K069/D008 storage area, and the Containment Building. As these units are in operation and are not closure, groundwater monitoring is not conducted for these units.

- B. All solid waste management units must comply with the requirements in LAC 33:V.3322. A surface impoundment, waste pile, and land treatment unit or landfill that receives hazardous waste after July 26, 1982 (hereinafter referred to as a "regulated unit") must comply with the requirements of LAC 33:V.3303-LAC 33:V.3321 in lieu of LAC 33:V.3322 for purposes of detecting, characterizing and responding to releases to the uppermost aquifer. The financial responsibility requirements of LAC 33:V.3322 apply to regulated units.

### **Response**

Exide acknowledges the requirements of this citation and will comply. Exide maintains one active and one closed solid waste landfill. The closed solid waste landfill is maintained under solid waste permit GD0332054P0326. The active solid waste landfill is maintained under solid waste permit GD0332054P0160.

**C. The owner or operator's regulated unit or units are not subject to regulation for releases into the uppermost aquifer under this Chapter if:**

- 1. The owner or operator is exempted under LAC 33:V.1501; or**

### **Response**

Exide is not exempted under LAC 33:V.1501; therefore, this citation does not apply.

- 2. He operates a unit which the administrative authority finds:**

- a. is an engineered structure;**

### **Response**

Exide's closed hazardous waste piles were closed in-place in 1985 and 1986 prior to promulgation of the environmental regulations. Clay with vegetative cover was selected as the cap system to minimize infiltration of precipitation.

- b. does not receive or contain liquid waste or waste containing free liquids;**

### **Response**

The hazardous waste piles are closed and no longer receive waste. Only solid wastes (i.e., wastes not containing free liquids) were placed in the hazardous waste piles when filling occurred.

- c. is designed and operated to exclude liquid, precipitation, and other run-on and run-off;**

### **Response**

The caps on the hazardous waste piles are clay with vegetative cover. The caps were designed and are operated to exclude liquid, precipitation and other run-on and run-off.

- d. has both inner and outer layers of containment enclosing the waste;**

### **Response**

As the waste piles were operated prior to promulgation of the environmental regulations, the closed waste piles do not have inner and outer layers of containment. The waste is enclosed by a clay liner and a clay cap.

- e. has a leak detection system built into each containment layer;**

### **Response**

As the waste piles were constructed and operated prior to promulgation of the environmental regulations, the piles do not have a leak detection system built into each containment layer. The waste piles are lined and capped with clay.

- f. the owner or operator will provide continuing operation and maintenance of these leak detection systems during the active life of the unit and the closure and post-closure care periods; and**

### **Response**

Exide acknowledges the requirements of this section and will comply. As the waste piles do not have leak detection systems, they cannot be operated or maintained. Exide does conduct scheduled inspections of the cap system and monitoring of groundwater in the detection monitoring program.

- g. to a reasonable degree of certainty, will not allow hazardous constituents to migrate beyond the outer containment layer prior to the end of the post-closure care period;**

### **Response**

The clay liner and cap, combined with the results of the detection monitoring program, provide a reasonable degree of certainty that hazardous constituents will not migrate beyond the outer containment layer prior to the end of the post-closure care period.

3. the administrative authority finds, pursuant to LAC 33:V.2719.D, that the treatment zone of a land treatment unit that qualifies as a regulated unit does not contain levels of hazardous constituents that are above background levels of those constituents by an amount that is statistically significant, and if an unsaturated zone monitoring program meeting the requirements of LAC 33:V.2711 has not shown a statistically significant increase in hazardous constituents below the treatment zone during the operating life of the unit. An exemption under LAC 33:V.3301.C can only relieve an owner or operator of responsibility to meet the requirements of this Chapter during the post-closure care period; or

### **Response**

Exide does not operate land treatment units; therefore this citation does not apply.

4. the administrative authority finds that there is no potential for migration of liquid from a regulated unit to the uppermost aquifer during the active life of the regulated unit (including the closure period) and the post-closure care period specified under LAC 33:V.3521. This demonstration must be certified by a qualified geologist or geotechnical engineer. In order to provide an adequate margin of safety in the prediction of potential migration of liquid, the owner or operator must base any predictions made under LAC 33:V.3301.C on assumptions that maximize the rate of liquid migration;

### **Response**

Exide does not request this exemption.

5. he designs and operates a pile in compliance with LAC 33:V.2301.C.

### **Response**

Exide operates the closed hazardous waste piles in accordance with the Closure/Post-Closure permit for those piles. Exide does not operate active hazardous waste piles.

**D. The regulations under this Chapter apply during the active life of the regulated unit (including the closure period). After closure of the regulated unit, the regulations in this Subpart:**

- 1. do not apply if all waste, waste residues, contaminated containment system components, and contaminated subsoils are removed or decontaminated at closure;**

### **Response**

The two closed hazardous waste piles were closed in-place and were not removed or decontaminated at closure; therefore this citation does not apply.

For the regulated units at the facility, including the Truck/Trailer Storage Area, the K069/D008 storage area, the Whole Battery storage area, Slag Stabilization Unit and the Containment Building, closure will be conducted by removing waste, waste residue, contaminated system components, and contaminated subsoils. If all waste, waste residues, contaminated system components and contaminated subsoils cannot be removed, the Containment Building will be closed in accordance with the requirements for a landfill as indicated in LAC 33:V.Chapter 18.

- 2. apply during the post-closure care period under LAC 33:V.Chapter 35, Subchapter B post-closure requirements if the owner or operator is conducting a detection monitoring program under LAC 33:V.3317;**

### **Response**

Exide acknowledges the requirements of this citation and will comply. Facility-wide groundwater monitoring is not required for facility operations in accordance with the RCRA Part B Hazardous Waste Permit.

The closed hazardous waste piles are maintained in accordance with the Hazardous Waste Permit and the Closure/Post-Closure

Permit for the waste piles. The facility's detection monitoring program includes semi-annual monitoring for one upgradient (MW-1R) and six downgradient monitoring wells (MW-4R, MW-12R, MW-16, MW-13R, MW-17, MW-18). Each well is screened in the first permeable zone, ranging from 38 to 45 feet below ground surface. The wells are monitored for pH, specific conductivity, dissolved lead, dissolved cadmium, iron, manganese, sodium, chloride and sulfate. The vertical limit of compliance is the shallow zone intercepted by the six downgradient wells. The horizontal limit of compliance for Waste Pile #1 is a line connecting wells MW-12R, MW-4R and MW-16. The horizontal limit of compliance for Waste Pile #2 is a line connecting wells MW-13R, MW-17 and MW-18. The Groundwater Sampling and Analysis Plan is provided in Appendix 7. The Plan includes a description of the monitoring well network, groundwater sampling procedures, documentation, decontamination and cross-contamination control, analytical procedures, field and laboratory quality assurance/quality control, monitoring well maintenance and reporting.

Monitoring is also conducted semi-annually at six monitoring wells located at the solid waste landfills in accordance with the Solid Waste Permits. However, this monitoring program is not addressed in this Hazardous Waste Permit Renewal.

3. **apply during the compliance period under LAC 33:V.3313 if the owner or operator is conducting a compliance monitoring program under LAC 33:V.3319 or a corrective action program under LAC 33:V.3321.**

#### **Response**

Exide conducts a detection monitoring program for the two closed hazardous waste piles in accordance with LAC 33:V.3317; therefore this citation does not apply. Exide will comply with the requirements of this section if a compliance monitoring program or corrective action program are required.

- E. **Regulations in this Chapter may apply to miscellaneous units when necessary to comply with LAC 33:V.3203-3207.**

**Response**

Exide acknowledges the requirements of this citation and will comply; however this does not apply as Exide does not have miscellaneous units.

- F. The regulations of this Chapter apply to all owners and operators subject to the requirements of LAC 33:V.305.H when the department issues either a post-closure permit or an enforceable document (as defined in LAC 33:V.305.H) at the facility. When the department issues an enforceable document, references in this Chapter to “in the permit” mean “in the enforceable document.”**

**Response**

Exide acknowledges the requirements of this citation and will comply.

- G. The administrative authority may replace all or part of the requirements of this Chapter applying to a regulated unit with alternative requirements for groundwater monitoring and corrective action for releases to groundwater set out in the permit (or in an enforceable document as defined in LAC 33:V.305.H) where the administrative authority determines that:**

- 1. the regulated unit is situated among solid waste management units (or areas of concern), a release has occurred, and both the regulated unit and one or more solid waste management unit(s) (or areas of concern) are likely to have contributed to the release; and**
- 2. it is not necessary to apply the groundwater monitoring and corrective action requirements of this Chapter because alternative requirements will protect human health and the environment.**

**Response**

Exide acknowledges that the Department may replace all or part of the requirements of this Chapter with alternative requirements for groundwater monitoring. Exide will comply with the requirements established by the Department.



**RESPONSE  
ATTACHMENT 35**

## **CHAPTER 35**

### **CLOSURE AND POST-CLOSURE**

**Exide acknowledges and will abide by all of the requirements for closure and post – closure, applicable for the containment buildings found in this Chapter. The Closure and Post – Closure Plan is included in detail in Appendix 8.**

**Response**

Exide acknowledges the requirement of this citation and will comply.

- B. As a means of satisfying the closure requirements of Paragraph A.2 of this Section, the owner or operator may demonstrate an alternative risk-assessment-based closure in accordance with LAC 33:I.Chapter 13.**

**Response**

Exide has not requested an alternative risk-assessment-based closure in accordance with LAB 33:I.Chapter 13; therefore, this citation does not apply.

**§3509. Closure Financial Responsibility**

- A. The operator shall submit, with the permit application, a closure plan which provides the estimated cost of closure, and post-closure monitoring including long-term monitoring devices, and the number of years of estimated operation before closure, and which is designed to minimize the need for future maintenance and to ensure against leakage or escape of hazardous waste.**

**Response**

Exide's Closure and Post Closure Plan is provided in Appendix 8. The plan includes closure procedures and cost estimates for the hazardous waste units (i.e., K069/D008 Storage Area, Truck/Trailer storage area, Whole Battery Storage area, Slag Stabilization area and Containment Building), and post-closure monitoring procedures and cost estimates for the closed hazardous waste piles. Closure costs were developed assuming a third party contractor or consultant would conduct the closure. The facility was opened in 1969. The final closure date of the facility has not yet been determined. For permitting purposes, the approximate timeframe that the facility is expected to continue operation is until the year 2021.

Post-closure activities will not be required for the hazardous waste units as they will be clean closed. Post-closure activities for the hazardous waste piles include scheduled inspections, cap maintenance and groundwater monitoring.

Closure procedures for the hazardous waste units includes shipment of remaining wastes (slag, batteries, battery components, and drums of waste) off-site for disposal at a permitted facility or recycling at a lead smelter. The units will be decontaminated with steam cleaners. Wash water will be collected and transported for off-site disposal. Samples of

wash water will be collected and analyzed to determine if the decontamination process was complete. Decontamination will be considered complete when wash water samples meet the following performance standards: lead, 0.050 mg/L; arsenic, 0.050 mg/L; chromium 0.050 mg/L; cadmium, 0.010 mg/L; and mercury 0.002 mg/L. Confirmatory samples will be collected for total lead, arsenic, chromium, barium, cadmium, silver, selenium, mercury, antimony, sulfate and pH. The performance standards for soils will be: total lead, 1400 mg/kg; arsenic, 12 mg/kg; chromium, 30,000 mg/kg; barium, 14,000 mg/kg; cadmium, 100 mg/kg; silver, 1000 mg/kg; selenium, 1000 mg/kg; mercury, 61 mg/kg and antimony, 82 mg/kg; and pH, 6.0 to 10.0 units. The performance standard for sulfate in soil will be a background standard determined at the time of closure as indicated in the Facility Closure Plan. A certification report stating that the unit was closed in accordance with the approved closure plan will be prepared for each unit and certified by an independent registered professional engineer.

- B. The operator shall create a "closure fund" under the requirements in LAC 33:V.Chapters 35 and 37.**

**Response**

Exide acknowledges the requirements of this section and will comply.

**§3511. Closure Plan; Amendment of Plan**

**A. Written Plan**

- 1. The owner or operator of a hazardous waste management facility must have a written closure plan. In addition, certain surface impoundments and waste piles from which the owner or operator intends to remove or decontaminate the hazardous waste at partial or final closure are required by LAC 33:V.2911.D and 2315.C to have contingent closure plans. The plan must be submitted with the permit application, in accordance with LAC 33:V.517.M and approved by the administrative authority as part of the permit issuance procedures under LAC 33:V.Chapters 3 and 7. In accordance with LAC 33:V.311, the approved closure plan will become a condition of any hazardous waste permit.**

**Response**

Exide's Closure and Post-Closure Plan is provided in Appendix 8. The plan includes general facility closure procedures; specific clean-closure procedures for the Slag Stabilization Area, the Containment Building, the K069/D008 Storage Area, the Truck Trailer Storage Area and the Whole Battery Storage Area; a closure

cost estimate; and post-closure care procedures and costs for the closed hazardous waste piles. Exide does not plan to conduct any partial closures. The approved plan is a condition of Exide's existing Hazardous Waste Permit for which a renewal is requested.

2. The administrative authority's approval of the plan must ensure that the approved closure plan is consistent with LAC 33:V.3507, 3511-3517, and the applicable requirements of LAC 33:V.Chapter 33, 1803, 1911, 1915, 2117, 2315, 2521, 2719, 2911, 3121, and 3203. Until final closure is completed and certified in accordance with LAC 33:V.3517, a copy of the approved plan and all approved revisions must be furnished to the administrative authority upon request, including request by mail.

**Response**

Exide acknowledges this requirement and will comply.

- B. Content of Plan.** The plan must identify steps necessary to perform partial and/or final closure of the facility at any point during its active life. The closure plan must include, at least:

1. a description of how each hazardous waste management unit at the facility will be closed in accordance with LAC 33:V.3507;

**Response**

Exide does not anticipate partial closure of any units. Each unit will be clean-closed after termination of facility operations.

The Closure and Post Closure Plan is provided in Appendix 8. Closure procedures for the hazardous waste units include shipment of remaining wastes off-site for disposal at a permitted facility or recycling at a lead smelter. Slag will be sent off-site for disposal. Batteries, battery components, lead-bearing materials, and drums stored at the K069/D008 area will be transported to another lead smelter for recycling. The units will be decontaminated with steam cleaners. Wash water will be collected and transported for off-site disposal. Samples of wash water will be collected and analyzed for lead to determine if the decontamination process was complete. Confirmatory samples will be collected for total lead analysis by drilling through the floor systems. A certification report stating that the unit was closed in accordance with the approved closure plan will be prepared for each unit and certified by an independent registered professional engineer.

2. a description of how final closure of the facility will be conducted in accordance with LAC 33:V.3507. The description must identify the maximum extent of the operations which will be unclosed during the active life of the facility; and

**Response**

Final clean-closure of the facility's hazardous waste units will minimize the need for further maintenance and eliminate threat to human health and the environment as no hazardous wastes or residues will remain at the facility. It is anticipated that the hazardous waste units (Slag Stabilization Unit, storage areas and Containment Building) will continue to operate for the lifetime of the facility.

The clay cap and liner of the closed hazardous waste piles minimizes post-closure escape of hazardous waste by enclosing the waste materials. The groundwater detection monitoring program also monitors the area for escape of hazardous waste into the groundwater.

3. an estimate of the maximum inventory of hazardous wastes ever on-site over the active life of the facility and a detailed description of the methods to be used during partial closures and final closure, including, but not limited to, methods for removing, transporting, treating, storing, or disposing of all hazardous wastes, and identification of the type(s) of the off-site hazardous waste management units to be used, if applicable; and

**Response**

The maximum inventory of hazardous wastes over the active life of the facility is:

Slag Stabilization Unit	144.4 tons
Containment Building - slag	3,333 tons
Containment Building – other materials	12,080 tons
K069/D008 Storage Area	29,920 gallons
Truck/Trailer Storage Area	85,000 gallons
Whole Battery Storage Area	121,500 gallons

Closure procedures for the hazardous waste units include shipment of remaining wastes off-site for disposal at a permitted facility or recycling at a lead smelter. Slag will be sent off-site for disposal. Slag will be removed with a front-end loader and placed into lined end-dump trailers. Battery components and lead-bearing materials will be removed with a front-end loader and placed into lined end-

dump trailers for transport to another lead smelter for recycling. Batteries and drums stored at the K069/D008 area will be loaded into vehicles with a fork lift and transported to another lead smelter for recycling. The Closure and Post Closure Plan is provided in Appendix 8.

4. **a detailed description of the steps needed to remove or decontaminate all hazardous waste residues and contaminated containment system components, equipment, structures, and soils during partial and final closure, including, but not limited to, procedures for cleaning equipment and removing contaminated soils, methods for sampling and testing surrounding soils, and criteria for determining the extent of decontamination required to satisfy the closure performance standard;**

**Response**

The units will be decontaminated with steam cleaners to remove residues. Front end loaders used to load wastes will also be decontaminated. The wash water will be collected in trailers and transported for off-site disposal. Samples of the wash water will be collected and analyzed for lead to determine if the decontamination process is complete. Personnel will wear appropriate personal protective equipment including respirators with particle cartridges, tyvek suits, gloves and hard hats with splashguards.

Soil samples will be collected by drilling through the floor systems at each unit. A total of 120 soil samples will be collected for lead analysis. A certification report will be prepared for each unit and certified by an independent registered professional engineer, stating the facility was closed in accordance with the approved closure plan. The Closure and Post-Closure Plan is provided in Appendix 8.

5. **a detailed description of other activities necessary during the closure period to ensure that all partial closures and final closure satisfy the closure performance standards, including, but not limited to, ground water monitoring, leachate collection, and run-on and run-off control;**

**Response**

During the closure period, groundwater monitoring and leachate collection will not be conducted as clean-closure will occur and the units do not have leachate collection systems. Run-on and run-off control will be provided at each unit by the perimeter berms and floor slopes.

6. a schedule for closure of each hazardous waste management unit and for final closure of the facility. The schedule must include, at a minimum, the total time required to close each hazardous waste management unit and the time required for intervening closure activities which will allow tracking of the progress of partial and final closure (for example, in the case of a landfill, unit estimates of the time required to treat or dispose of all hazardous waste inventory and of the time required to place a final cover must be included); and

**Response**

Exide anticipates that the hazardous waste management units will operate for the lifetime of the facility. Waste removal will occur within 90 days after receiving the final volume of hazardous waste. The closure plan will be completed within 6 months of receiving the final volume of hazardous waste.

7. for facilities that use trust funds to establish financial assurance LAC 33:V.3707 and 3711 and that are expected to close prior to the expiration of the permit, an estimate of the expected year of final closure; and

**Response**

Exide is not anticipated to close prior to the expiration of the renewed permit; therefore this section does not apply.

8. for facilities where the administrative authority has applied alternative requirements at a regulated unit under LAC 33:V.3301.G, 3501.D, and/or 3701.D, either the alternative requirements applying to the regulated unit or a reference to the enforceable document containing those alternative requirements.

**Response**

Exide does not have alternative requirements for the regulated units; therefore, this section does not apply.

- C. **Amendment of Plan.** The owner or operator must submit to the Office of Environmental Services, Permits Division a written notification of or request for a permit modification to authorize a change in operating plans, facility design, or the approved closure plan in accordance with the applicable procedures in LAC 33:V.Chapters 3 and 7. The written notification or request must include a copy of the amended closure plan for review or approval by the administrative authority.



### **Response**

Exide acknowledges this citation and will comply. Exide submitted a permit modification in October 2001 to propose upgrades to the containment building floor system and include the containment building in the permit. The upgrades to the floor system were completed in November 2003. The modification included an amended closure plan. Comments on the modification request were received from LDEQ in March 2003. The modification request has not yet been approved, but the modifications are included in this renewal application.

1. **The owner or operator may submit a written notification or request to the to the Office of Environmental Services, Permits Division for a permit modification to amend the closure plan at any time prior to the notification of partial or final closure of the facility.**

### **Response**

Exide acknowledges this citation and will comply.

2. **The owner or operator must submit a written notification of or request for a permit modification to authorize a change in the approved closure plan whenever:**
  - a. **changes in operating plans or facility design affect the closure plan; or**
  - b. **there is a change in the expected year of closure, if applicable; or**
  - c. **in conducting partial or final closure activities, unexpected events require a modification of the approved closure plan.**

### **Response**

Exide acknowledges this citation and will comply.

3. **The owner or operator must submit to the Office of Environmental Services, Permits Division a written request for a permit modification including a copy of the amended closure plan for approval at least 60 days prior to the proposed change in facility design or operation, or no later than 60 days after an unexpected event has occurred which has affected the closure plan. If an unexpected event occurs during the partial or final closure period, the owner or operator must request a permit modification no later than 30 days after the unexpected event. An owner or operator of a surface impoundment or waste pile**

that intends to remove all hazardous waste at closure and is not otherwise required to prepare a contingent closure plan under LAC 33:V.2911.D or 2315.D must submit an amended closure plan to the Office of Environmental Services, Permits Division no later than 60 days from the date that the owner or operator or administrative authority determines that the hazardous waste management unit must be closed as a landfill, subject to the requirements of LAC 33:V.2521, or no later than 30 days from that date if the determination is made during partial closure or final closure. The administrative authority will approve, disapprove, or modify this amended plan in accordance with the procedures in LAC 33:V.Chapters 3 and 7. In accordance with LAC 33:V.311, the approved closure plan will become a condition of any hazardous waste permit issued.

**Response**

Exide acknowledges this citation and will comply.

4. The administrative authority may request modifications to the plan under the conditions described in LAC 33:V.3511.A.2. The owner or operator must submit the modified plan within 60 days of the administrative authority's request, or within 30 days if the change in facility conditions occurs during partial or final closure. Any modifications requested by the administrative authority will be approved in LAC 33:V.Chapters 3 and 7.

**Response**

Exide acknowledges this citation and will comply.

5. The owner or operator requests the administrative authority to apply alternative requirements to a regulated unit under LAC 33:V.3301.G, 3501.D, and/or 3701.D.

**Response**

Exide acknowledges this citation and will comply; however Exide does not request alternative requirements.

**D. Notification of Partial Closure and Final Closure**

1. The owner or operator must notify the Office of Environmental Services, Permits Division in writing at least 60 days prior to the date on which he expects to begin closure of a surface impoundment, waste pile, land treatment or landfill unit, or final closure of a facility with such a unit. The owner or

operator must notify the Office of Environmental Services, Permits Division in writing at least 45 days prior to the date on which he expects to begin final closure of a facility with only treatment or storage tanks, container storage, or incinerator units to be closed. The owner or operator must notify the Office of Environmental Services, Permits Division in writing at least 45 days prior to the date on which he expects to begin partial or final closure of a boiler or industrial furnace, whichever is earlier.

**Response**

Exide acknowledges this citation and will comply.

2. The date when he or she "expects to begin closure" must be one of the following:
  - a. No later than 30 days after the date on which any hazardous waste management unit receives the known final volume of hazardous wastes or, if there is a reasonable possibility that the hazardous waste management unit will receive additional hazardous wastes, no later than one year after the date on which the unit received the most recent volume of hazardous waste. If the owner or operator of a hazardous waste management unit can demonstrate to the administrative authority that the hazardous waste management unit or facility has the capacity to receive additional hazardous wastes and he or she has taken, and will continue to take, all steps to prevent threats to human health and the environment, including compliance with all applicable permit requirements, the administrative authority may approve an extension to this one-year limit.
  - b. For units meeting the requirements of LAC 33:V.3513.D, no later than 30 days after the date on which the hazardous waste management unit receives the known final volume of non-hazardous wastes, or if there is a reasonable possibility that the hazardous waste management unit will receive additional non-hazardous wastes, no later than one year after the date on which the unit received the most recent volume of non-hazardous wastes. If the owner or operator can demonstrate to the administrative authority that the hazardous waste management unit has the capacity to receive additional non-hazardous wastes and he or she

has taken, and will continue to take, all steps to prevent threats to human health and the environment, including compliance with all applicable permit requirements, the administrative authority may approve an extension to this one-year limit.

**Response**

Exide acknowledges this citation and will comply.

3. If the facility's permit is terminated, or if the facility is otherwise ordered, by judicial decree or final order under R.S. 30:2025, to cease receiving hazardous wastes or to close, then the requirements of this Paragraph do not apply. However, the owner or operator must close the facility in accordance with the deadlines established in LAC 33:V.3513.

**Response**

Exide acknowledges this citation and will comply.

- E. Removal of Wastes and Decontamination or Dismantling of Equipment. Nothing in this Section shall preclude the owner or operator from removing hazardous wastes and decontaminating or dismantling equipment in accordance with the approved partial or final closure plan at any time before or after notification of partial or final closure.

**Response**

Exide acknowledges this citation and will comply.

**§3513. Closure; Time Allowed for Closure**

- A. Within 90 days after receiving the final volume of hazardous wastes, or the final volume of non-hazardous wastes if the owner or operator receives administrative authority allowance pursuant to LAC 33:V.3513.D and complies with all applicable requirements in LAC 33:V.3513.D and E, at a hazardous waste management unit or facility, the owner or operator must treat, remove from the facility or unit, or dispose of on-site, all hazardous wastes in accordance with the approved closure plan. The administrative authority may approve a longer period if the owner or operator complies with all applicable requirements for requesting a modification to the permit and demonstrates that:
  1. the activities required to comply with this Paragraph will, of necessity, take longer than 90 days to complete, or

**RESPONSE  
ATTACHMENT 40**

## **CHAPTER 40**

### **USED OIL**

**Included as this Section are the responses to the Chapter 40 regulations. Included as Appendix 16 is Exide's Used Oil Plan that addresses the applicable citations.**

**Used Oil Transfer Facility**—any transportation-related facility, including loading docks, parking areas, storage areas, and other areas where shipments of used oil are held for more than 24 hours and not longer than 35 days during the normal course of transportation or prior to an activity performed in accordance with LAC 33:V.4009.B.2. Transfer facilities that store used oil for more than 35 days are subject to regulation under Subchapter E of this Chapter.

**Used Oil Transporter**—any person who transports used oil, any person who collects used oil from more than one generator and transports the collected oil, and owners and operators of used oil transfer facilities. Used oil transporters may consolidate or aggregate loads of used oil for purposes of transportation but, with the following exception, may not process used oil. Transporters may conduct incidental processing operations that occur in the normal course of used oil transportation (e.g., settling and water separation), but that are not designed to produce (or make more amenable for production of) used oil-derived products or used oil fuel.

## **Subchapter A. Materials Regulated as Used Oil**

### **§4003. Applicability**

This Section identifies those materials which are subject to regulation as used oil under this Chapter. This Section also identifies some materials that are not subject to regulation as used oil under this Chapter and indicates whether these materials may be subject to regulation as hazardous waste under this Subpart.

- A. **Used Oil.** Used oil is to be recycled unless a used oil handler disposes of it or sends it for disposal. Except as provided in LAC 33:V.4005, the regulations of LAC 33:V.Chapter 40 apply to used oil and to materials identified in LAC 33:V.4003 as being subject to regulation as used oil, whether or not the used oil or material exhibits any characteristics of hazardous waste identified in LAC 33:V.4903.

### **Response**

Exide acknowledges and understands this provision. Exide contracts a recycling company to reclaim all used oil generated at the Baton Rouge smelter. The Used Oil Plan is included as Appendix 16. The Used Oil Plan includes procedures for storage and transportation of used oil and a contingency plan for spills.

## **B. Mixtures of Used Oil and Hazardous Waste**

### **1. Listed Hazardous Waste**

- a. **Mixtures of used oil and hazardous waste that is listed in LAC 33:V.4901 are subject to regulation as hazardous waste under LAC 33:V.Subpart 1, rather than as used oil under LAC 33:V.Chapter 40.**

#### **Response**

Exide acknowledges and understands this provision. Exide does not mix used oil and hazardous waste. A copy of the Used Oil Plan is included in Appendix 16. The Used Oil Plan includes procedures for storage and transportation of used oil and a contingency plan for spills.

- b. **Rebuttable Presumption for Used Oil. Used oil containing more than 1,000 ppm total halogens is presumed to be a hazardous waste because it has been mixed with halogenated hazardous waste listed in LAC 33:V.4901. Persons may rebut this presumption by demonstrating that the used oil does not contain hazardous waste (for example, by using an analytical method from EPA Publication SW-846, Third Edition, to show that the used oil does not contain significant concentrations of halogenated hazardous constituents listed in LAC 33:V.3105.Table 1). EPA Publication SW-846, Third Edition, is available from the Government Printing Office, Superintendent of Documents, Box 371954, Pittsburgh, PA 15250-7954, (202) 512-1800 (document number 955-001-00000-1).**

#### **Response**

Exide acknowledges and understands this provision. Exide does not mix used oil and hazardous waste. A copy of the Used Oil Plan is included in Appendix 16. The Used Oil Plan includes procedures for storage and transportation of used oil and a contingency plan for spills.

- i. **The rebuttable presumption does not apply to metalworking oils/fluids containing chlorinated paraffins if they are processed through a tolling arrangement as described in LAC 33:V.4017.C to reclaim metalworking oils/fluids. The presumption does apply to metalworking oils/fluids if such oils/fluids are recycled in any other manner or disposed.**



### **Response**

This provision does not apply since Exide does not use oils in metal working.

- ii. **The rebuttable presumption does not apply to used oils contaminated with chlorofluorocarbons (CFCs) removed from refrigeration units in which the CFCs are destined for reclamation. The rebuttable presumption does apply to used oils contaminated with CFCs that have been mixed with used oil from sources other than refrigeration units.**

### **Response**

Exide acknowledges and understands this provision. A copy of the Used Oil Plan is included in Appendix 16. The Used Oil Plan includes procedures for storage and transportation of used oil and a contingency plan for spills. Exide does not manage used oils contaminated with CFCs.

- 2. **Characteristic Hazardous Waste. Mixtures of used oil and hazardous waste that solely exhibits one or more of the hazardous waste characteristic identified in LAC 33:V.4903 and mixtures of used oil and hazardous waste that is listed in LAC 33:V.4901 solely because it exhibits one or more of the characteristics of hazardous waste identified in LAC 33:V.4903 are subject to:**
  - a. **regulation as hazardous waste under LAC 33:V.Subpart 1 rather than as used oil under LAC 33:V.Chapter 40 if the resultant mixture exhibits any characteristics of hazardous waste identified in LAC 33:V.4903, except as provided in LAC 33:V.4003.B.2.c;**
  - b. **regulation as used oil under LAC 33:V.Chapter 40 if the resultant mixture does not exhibit any characteristics of hazardous waste identified under LAC 33:V.4903, except as specified in LAC 33:V.4003.B.2.c; or**
  - c. **regulation as used oil under this Chapter if the mixture is of used oil and a waste which is hazardous solely because it exhibits the characteristic of ignitability (e.g., ignitable-only mineral spirits), provided that the resulting mixture does not exhibit the characteristic of ignitability under LAC 33:V.4903.**

### **Response**

Exide acknowledges and understands this provision. Exide does not mix used oil and hazardous waste. A copy of the Used Oil Plan is included in Appendix 16. The Used Oil Plan includes procedures for storage and transportation of used oil and a contingency plan for spills.

#### **C. Materials Containing or Otherwise Contaminated with Used Oil**

1. **Except as provided in LAC 33:V.4003.C.2, materials containing or otherwise contaminated with used oil from which the used oil has been properly drained or removed to the extent possible such that no visible signs of free-flowing oil remain in or on the material:**
  - a. **are not used oil and thus not subject to LAC 33:V.Chapter 40; and**
  - b. **are subject to the hazardous waste regulations of LAC 33:V.Subpart 1, if applicable.**

### **Response**

Exide acknowledges and understands this provision. Management of materials contaminated with used oil is addressed in the Used Oil Plan in Appendix 16. The Used Oil Plan includes procedures for storage and transportation of used oil and a contingency plan for spills.

2. **Materials containing or otherwise contaminated with used oil that are burned for energy recovery are subject to regulation as used oil under LAC 33:V.Chapter 40.**

### **Response**

Exide acknowledges and understands this provision, however, Exide does not burn used oil or materials contaminated with used oil for energy recovery.

3. **Used oil drained or removed from materials containing or otherwise contaminated with used oil is subject to regulation as used oil under LAC 33:V.Chapter 40.**

### **Response**

Exide acknowledges and understands this provision. Management of used oil drained or removed from materials containing or contaminated with used oil is addressed in the Used Oil Plan in Appendix 16. The Used Oil Plan includes procedures for storage and transportation of used oil and a contingency plan for spills.

#### **D. Mixtures of Used Oil with Products**

1. **Except as provided in LAC 33:V.4003.D.2, mixtures of used oil and fuels or other fuel products are subject to regulation as used oil under LAC 33:V.Chapter 40.**

### **Response**

Exide acknowledges and understands this provision. A copy of the Used Oil Plan is included in Appendix 16. The Used Oil Plan includes procedures for storage and transportation of used oil and a contingency plan for spills. It is not standard practice at Exide to mix oil with fuel or other fuel products; however, mixing of oil with fuel or other fuel products does happen on occasion as part of facility operations.

2. **Mixtures of used oil and diesel fuel mixed on-site by the generator of the used oil for use in the generator's own vehicles are not subject to LAC 33:V.Chapter 40 once the used oil and diesel fuel have been mixed. Prior to mixing, the used oil is subject to the requirements of LAC 33:V.Chapter 40.Subchapter B.**

### **Response**

Exide acknowledges and understands this provision. A copy of the Used Oil Plan is included in Appendix 16. The Used Oil Plan includes procedures for storage and transportation of used oil and a contingency plan for spills. It is not standard practice at Exide to mix oil with diesel fuel; however, mixing of oil with diesel does happen on occasion as part of facility operations.

## **E. Materials Derived from Used Oil**

- 1. Materials that are reclaimed from used oil that are used beneficially and are not burned for energy recovery or used in a manner constituting disposal (e.g., re-refined lubricants) are:**
  - a. not used oil and, thus, are not subject to LAC 33:V.Chapter 40; and**
  - b. not solid wastes and, thus, are not subject to the hazardous waste regulations of LAC 33:V.Subpart 1 as provided in LAC 33:V.109.Hazardous Waste.4.b.i.**

### **Response**

Exide acknowledges and understands this provision; however Exide does not manage materials derived from used oil. A copy of the Used Oil Plan is included in Appendix 16. The Used Oil Plan includes procedures for storage and transportation of used oil and a contingency plan for spills.

- 2. Materials produced from used oil that are burned for energy recovery (e.g., used oil fuels) are subject to regulation as used oil under LAC 33:V.Chapter 40.**

### **Response**

Exide acknowledges and understands this provision; however Exide does not burn materials produced from used oil for energy recovery. A copy of the Used Oil Plan is included in Appendix 16. The Used Oil Plan includes procedures for storage and transportation of used oil and a contingency plan for spills.

- 3. Except as provided in LAC 33:V.4003.E.4, materials derived from used oil that are disposed of or used in a manner constituting disposal are:**
  - a. not used oil and, thus, are not subject to LAC 33:V.Chapter 40; and**

- b. solid wastes and, thus, are subject to the hazardous waste regulations of LAC 33:V.Subpart 1 if the materials are listed or identified as hazardous waste.

**Response**

Exide acknowledges and understands this provision; however Exide does not manage materials derived from used oil. The Used Oil Plan (Appendix 16) includes procedures for storage and transportation of used oil and a contingency plan for spills.

4. Used oil re-refining distillation bottoms that are used as feedstock to manufacture asphalt products are not subject to LAC 33:V.Chapter 40.

**Response**

This provision does not apply since Exide does not generate this type of material.

- F. **Wastewater.** Wastewater, the discharge of which is subject to regulation under either section 402 or section 307(b) of the Clean Water Act and LAC 33:IX (including wastewaters at facilities which have eliminated the discharge of wastewater), contaminated with de minimis quantities of used oil is not subject to the requirements of this Chapter. For purposes of LAC 33:V.4003.F, "de minimis" quantities of used oils are defined as small spills, leaks, or drippings from pumps, machinery, pipes, and other similar equipment during normal operations or small amounts of oil lost to the wastewater treatment system during washing or draining operations. This exception will not apply if the used oil is discarded as a result of abnormal manufacturing operations resulting in substantial leaks, spills, or other releases or the used oil is recovered from wastewaters.

**Response**

Exide acknowledges and understands the above provision regarding wastewater contaminated with de minimus quantities of used oil. Wastewater contaminated with de minimus quantities of used oil will be processed in the facility's wastewater treatment plant and discharged in accordance with the facility's NPDES permit. Used oil discarded as a result of abnormal manufacturing operations resulting in substantial leaks, spills or other releases or recovered from wastewaters will be managed in

accordance with the Used Oil Plan in Appendix 16 and the RCRA Contingency and Emergency Response Plan in Appendix 6. The Used Oil Plan includes procedures for storage and transportation of used oil and a contingency plan for spills.

**G. Used Oil Introduced into Crude Oil Pipelines or a Petroleum Refining Facility**

1. **Used oil mixed with crude oil or natural gas liquids (e.g., in a production separator or crude oil stock tank) for insertion into a crude oil pipeline is exempt from the requirements of LAC 33:V.Chapter 40. The used oil is subject to the requirements of LAC 33:V.Chapter 40 prior to the mixing of used oil with crude oil or natural gas liquids.**

**Response**

This citation does not apply, Exide is not a crude oil pipeline or refining facility.

2. **Mixtures of used oil and crude oil or natural gas liquids containing less than 1 percent used oil that are being stored or transported to a crude oil pipeline or petroleum refining facility for insertion into the refining process at a point prior to crude distillation or catalytic cracking are exempt from the requirements of LAC 33:V.Chapter 40.**

**Response**

This citation does not apply, Exide is not a crude oil pipeline or refining facility.

3. **Used oil that is inserted into the petroleum refining facility process before crude distillation or catalytic cracking without prior mixing with crude oil is exempt from the requirements of LAC 33:V.Chapter 40 provided that the used oil constitutes less than 1 percent of the crude oil feed to any petroleum refining facility process unit at any given time. Prior to insertion into the petroleum refining facility process, the used oil is subject to the requirements of LAC 33:V.Chapter 40.**

### **Response**

This citation does not apply, Exide is not a crude oil pipeline or refining facility.

4. **Except as provided in LAC 33:V.4003.G.5, used oil that is introduced into a petroleum refining facility process after crude distillation or catalytic cracking is exempt from the requirements of LAC 33:V.Chapter 40 only if the used oil meets the specification of LAC 33:V.4005. Prior to insertion into the petroleum refining facility process, the used oil is subject to the requirements of LAC 33:V.Chapter 40.**

### **Response**

This citation does not apply, Exide is not a crude oil pipeline or refining facility.

5. **Used oil that is incidentally captured by a hydrocarbon recovery system or wastewater treatment system as part of routine process operations at a petroleum refining facility and inserted into the petroleum refining facility process is exempt from the requirements of LAC 33:V.Chapter 40. This exemption does not extend to used oil which is intentionally introduced into a hydrocarbon recovery system (e.g., by pouring collected used oil into the wastewater treatment system).**

### **Response**

This citation does not apply, Exide is not a crude oil pipeline or refining facility and does not operate a hydrocarbon recovery system.

6. **Tank bottoms from stock tanks containing exempt mixtures of used oil and crude oil or natural gas liquids are exempt from the requirements of LAC 33:V.Chapter 40.**

### **Response**

This citation does not apply, Exide does not maintain stock tanks containing exempt mixtures of used oil and crude oil or natural gas liquids.

- H. **Used Oil on Vessels.** Used oil produced on vessels from normal shipboard operations is not subject to this Chapter until it is transported ashore.

**Response**

Exide acknowledges and understands this provision. This citation does not apply to the Exide facility as used oil is not produced on vessels.

- I. **Used Oil Containing PCBs.** Used oil containing PCBs (as defined at 40 CFR 761.3) at any concentration less than 50 ppm is subject to the requirements of this Subchapter. Used oil subject to the requirements of this Subchapter may also be subject to the prohibitions and requirements found at 40 CFR part 761, including sections 761.20(d) and (e). Used oil containing PCBs at concentrations of 50 ppm or greater is not subject to the requirements of this Subchapter, but is subject to regulation under 40 CFR part 761.

**Response**

Exide acknowledges and understands this provision. Exide does not manage used oil contaminated with PCBs. A copy of the Used Oil Plan is included in Appendix 16. The Used Oil Plan includes procedures for storage and transportation of used oil and a contingency plan for spills.

**§4005. Used Oil Specifications**

Used oil burned for energy recovery and any fuel produced from used oil by processing, blending, or other treatment is subject to regulation under this Chapter unless it is shown not to exceed any of the allowable levels of the constituents and properties in the specifications shown in LAC 33:V.4005.Table 1. Once used oil that is to be burned for energy recovery has been shown not to exceed any specifications and the person making that showing complies with LAC 33:V.4081, 4083, and 4085.B, the used oil is no longer subject to this Chapter.

**Response**

Exide acknowledges this provision. However, this citation is not applicable since Exide does not burn used oil for energy recovery.



### **Response**

Exide acknowledges and understands this provision. Exide does not mix used oil and hazardous waste. A copy of the Used Oil Plan is included in Appendix 16. The Used Oil Plan includes procedures for storage and transportation of used oil and a contingency plan for spills.

### **§4013. Used Oil Storage**

**Used oil generators are subject to all applicable Spill Prevention, Control, and Countermeasures (40 CFR part 112) in addition to the requirements of this Subchapter. Used oil generators are also subject to the Underground Storage Tanks (LAC 33:XI) standards for used oil stored in underground tanks whether or not the used oil exhibits any characteristics of hazardous waste, in addition to the requirements of this Subchapter.**

### **Response**

Exide acknowledges and understands this provision. A copy of the Used Oil Plan is included in Appendix 16. The Used Oil Plan includes procedures for storage and transportation of used oil and a contingency plan for spills. The requirements of 40 CFR part 112 are addressed in the RCRA Contingency and Emergency Response Plan included in Appendix 6. The requirements of Underground Storage Tank (LAC 33:XI) standards do not apply as underground storage tanks are not used for storage of used oil.

- A. Storage Units. Used oil generators shall not store used oil in units other than tanks, containers, or units subject to regulation under LAC 33:V.Chapters 9, 15, 17, 19, 21, 23, 25, 27-29, 31-33, 35, 37, and 43.**

### **Response**

Used oil will not be stored at Exide in units other than tanks, containers, or units subject to the regulations listed above. Please refer to the Used Oil Plan in Appendix 16 for detailed information regarding used oil storage at Exide. The Used Oil Plan includes procedures for storage and transportation of used oil and a contingency plan for spills.

- B. Condition of Units. Containers and aboveground tanks used to store used oil at generator facilities must:**

- 1. be in good condition (no severe rusting, apparent structural defects or deterioration); and**

2. not be leaking (no visible leaks).

**Response**

All containers/aboveground tanks used to store used oil at Exide will be in good condition with no severe rusting, apparent structural defects or deterioration. The unit will not have any visible leaks.

**C. Labels**

1. Containers and aboveground tanks used to store used oil at generator facilities must be labeled or marked clearly with the words "Used Oil."
2. Fill pipes used to transfer used oil into underground storage tanks at generator facilities must be labeled or marked clearly with the words "Used Oil."

**Response**

Exide will label or mark clearly any container or aboveground tank used to store used oil or fill pipes used to transfer used oil with the words "Used Oil". Underground storage tanks are not used to store used oil at Exide.

- D. Response to Releases. Upon detection of a release of used oil to the environment which is not subject to the requirements of LAC 33:XI.715 and which has occurred after the effective date of the recycled used oil management program in effect in the state in which the release is located, a generator must perform the following cleanup steps:**

1. stop the release;
2. contain the released used oil;
3. clean up and properly manage the released used oil and other materials; and

4. if necessary, repair or replace any leaking used oil storage containers or tanks prior to returning them to service.

**Response**

Upon the detection of a used oil release to the environment, Exide will follow the provisions listed in the RCRA Contingency and Emergency Response Plan (Appendix 6) including – stop the release, contain any released used oil, clean up and properly manage the released used oil and other materials. If necessary, the used oil storage unit will be repaired or replaced prior to returning to service.

**§4015. On-site Burning in Space Heaters**

Generators may burn used oil in used oil-fired space heaters provided that:

- A. the heater burns only used oil that the owner or operator generates or used oil received from household do-it-yourself used oil generators;
- B. the heater is designed to have a maximum capacity of not more than 0.5 million Btu per hour; and
- C. the combustion gases from the heater are vented to the ambient air.

**Response**

Exide acknowledges this provision. However it is not applicable since Exide does not burn used oil.

**§4017. Off-site Shipments**

Except as provided in LAC 33:V.4017.A-C, generators must ensure that their used oil is transported only by transporters who have obtained EPA identification numbers.

- A. Self-transportation of Small Amounts to Approved Collection Centers. Generators may transport, without an EPA identification number, used oil that is generated at the generator's site and used oil

**RESPONSE  
ATTACHMENT 41**

# **CHAPTER 41**

## **RECYCLABLE MATERIALS**

**Response**

Exide acknowledges this section and will comply.

- E. Upon determination by the generator that any material held for use, reuse, or recycle is to be discarded, such material shall no longer be considered a recyclable material and shall be handled as otherwise required in these regulations.**

**Response**

Exide acknowledges this section and will comply.

**§4103. Notification**

- A. All operators of facilities which generate, transport, treat, store, or utilize or recycle a recyclable material that have not previously notified shall notify the department within 90 days of promulgation of these rules and regulations that they are engaged in activities involving a recyclable material as defined in LAC 33:V.109. For notification, the operator may obtain notification forms from the department.**

**Response**

Exide acknowledges this section and has complied.

**§4105. Requirements for Recyclable Material**

**Recyclable materials are subject to additional regulations as follows:**

- A. Hazardous wastes that are recycled are subject to the requirements for generators, transporters, and storage facilities of Subchapter A (Group I) of this Chapter except for the materials listed in Subsections B and C of this Section. Hazardous wastes that are recycled will be known as "recyclable materials."**

**Response**

Exide acknowledges this section and will comply. Exide recycles spent hazardous wastes including lead-acid batteries and other lead-bearing materials. These materials are considered hazardous by characteristic (D002, D004, D006, D007, D008, D010, D011) or listing (K069).

**B. The following recyclable materials (Group II) are subject to the requirements of Subchapter B of this Chapter and all applicable provisions as provided in Subchapter B of this Chapter:**

- 1. industrial ethyl alcohol that is reclaimed except that, unless otherwise provided in an international agreement:**

**Response**

This section does not apply as Exide does not recycle industrial ethyl alcohol.

- a. a person initiating a shipment for reclamation in a foreign country, and any intermediary arranging for the shipment, must comply with the requirements applicable to a primary exporter in LAC 33:V.1113.D, G, and H, export such materials only upon consent of the receiving country and in conformance with the Louisiana State Acknowledgment of Consent as defined in LAC 33:V.1113, and provide a copy of the Louisiana State Acknowledgment of Consent to the shipment to the transporter transporting the shipment for export;**
  - b. transporters transporting a shipment for export may not accept a shipment if he knows the shipment does not conform to the Louisiana State Acknowledgment of Consent, must ensure that a copy of the Louisiana State Acknowledgment of Consent accompanies the shipment and must ensure that it is delivered to the facility designated by the person initiating the shipment;**
- 2. Reserved.**
- 3. Reserved.**
- 4. scrap metal that is not excluded under LAC 33:V.105.D.1.m;**

### **Response**

Exide purchases scrap iron only for use as furnace feed stock; however, Exide does not recycle scrap metal. Therefore, this section does not apply as Exide does not recycle scrap metal.

5. Reserved.
6. Reserved.
7. Reserved.
8. fuels produced from the refining of oil-bearing hazardous wastes along with normal process streams at a petroleum refining facility if such wastes result from normal petroleum refining production, and transportation practices (this exemption does not apply to fuels produced from oil recovered from oil-bearing hazardous waste, where such recovered oil is already excluded under LAC 33:V.105.D.1.I);

### **Response**

This section does not apply as Exide does not recycle fuels from the refining of oil-bearing hazardous wastes.

9. hazardous waste fuel produced from oil-bearing hazardous wastes from petroleum refining, production, or transportation practices, or produced from oil reclaimed from such hazardous wastes, where such hazardous wastes are reintroduced into a process that does not use distillation or does not produce products from crude oil so long as the resulting fuel meets the used oil specification under LAC 33:V.4005 of this Chapter and so long as no other hazardous wastes are used to produce the hazardous waste fuel;

### **Response**

This section does not apply as Exide does not recycle hazardous waste fuels from petroleum refining.

10. hazardous waste fuel produced from oil-bearing hazardous waste from petroleum refining production, and transportation practices, where such hazardous wastes are reintroduced into



a refining process after a point at which contaminants are removed, so long as the fuel meets the used oil fuel specification under LAC 33:V.4005;

**Response**

This section does not apply as Exide does not recycle hazardous waste fuels from petroleum refining.

11. oil reclaimed from oil-bearing hazardous wastes from petroleum refining, production, and transportation practices, which reclaimed oil is burned as a fuel without reintroduction to a refining process, so long as the reclaimed oil meets the used oil fuel specification under LAC 33:V.4005.

**Response**

This section does not apply as Exide does not recycle oil reclaimed from oil-bearing hazardous waste.

- C. The following recyclable materials (Group III) are only subject to the requirements of LAC 33:V.Chapter 41.Subchapter C, Chapter 30 and all applicable provisions as provided in LAC 33:V.Chapters 1, 3, 5, 7, 27, 31, and 43:

1. recyclable materials used in a manner constituting disposal;

**Response**

This section does not apply as Exide does not dispose of recycled materials.

2. hazardous wastes burned for energy recovery in boilers and industrial furnaces that are not regulated under LAC 33:V.Chapters 31 or 43.Subchapter N;

**Response**

This section does not apply as Exide does not burn hazardous waste for energy recovery in boilers and industrial furnaces.

3. **recyclable materials from which precious metals are reclaimed;**

**Response**

This section does not apply as Exide does not reclaim precious metals from recyclable materials. Exide reclaims lead from spent lead-acid batteries and other lead bearing materials.

4. **spent lead-acid batteries that are being reclaimed; and**

**Response**

Exide acknowledges this citation and will comply. Exide reclaims and recycles spent lead-acid batteries.

5. **used oil that exhibits one or more of the characteristics of hazardous waste and is burned for energy recovery in boilers and industrial furnaces that are not regulated under LAC 33:V.Chapters 31 or 43.Subchapter N.**

**Response**

This section does not apply as Exide does not burn used oil for energy recovery. Used oil is sent off-site for recycling in accordance with the Used Oil Plan in Appendix 16.

- D. **The recyclable materials listed in Paragraph D.1 of this Section are subject to all requirements and provisions of Paragraph D.2 of this Section.**

1. **Any hazardous waste-derived product produced by any commercial hazardous waste incineration facility that accepts hazardous waste or hazardous waste products for a fee, or any commercial recycling or resource recovery facility that recycles hazardous waste to produce aggregates and that accepts hazardous wastes or hazardous waste products for a fee, provided that such derived product is:**

**Response**

Sections D.1 and D.2 do not apply as Exide does not operate an incinerator.

- a. inherently waste-like;
  - b. accumulated speculatively;
  - c. used as a fuel; or
  - d. used in a manner constituting disposal.
2. Recycling facilities and other entities receiving, handling, shipping, or selling the derived product from the point of production to the ultimate use of the product shall maintain for a period of three years from the date of transaction such records as needed to furnish the following information to the department upon request:
- a. the name and location of each entity receiving the hazardous waste-derived product. This is to include the names, business addresses, telephone numbers, and functions of all brokers, wholesalers, middlemen, interim purchasers, and all other parties involved in any and all transactions relating to the derived product from the point of production by the recycler to the product's ultimate use;
  - b. the date of each shipment, the physical state and description of the hazardous waste-derived product shipped, and the total quantity of the product shipped by units of weight. If the weight is unknown, the volume and estimated weight should be provided;
  - c. copies of analytical results;
  - d. all financial documents necessary to verify all transactions and/or transfers involving the derived product, including:
    - i. individual sales invoices to verify the sales price of each financial transaction;

- ii. state or federal tax documents or other official receipts to verify total quarterly sales of the derived product by the recycler; and
  - iii. all other documents necessary to verify any type of financial transaction involving transfer of the product, including such arrangements as donations, tax credits, producer paying shipping charges, or producer paying another party to receive the product.
- E. Used oil that is recycled and is also a hazardous waste solely because it exhibits a hazardous characteristic is not subject to the requirements of LAC 33:V.Subpart 1, but is regulated under LAC 33:V.Chapter 40. Used oil that is recycled includes any used oil which is reused, following its original use, for any purpose (including the purpose for which the oil was originally used). Such term includes, but is not limited to, oil which is re-refined, reclaimed, burned for energy recovery, or reprocessed.

**Response**

Exide acknowledges this requirement and will comply.

- F. Hazardous waste that is exported to or imported from designated member countries of the Organization for Economic Cooperation and Development (OECD) (as defined in LAC 33:V.1113.I.1.a) for the purpose of recovery is subject to the requirements of LAC 33:V.Chapter 11.Subchapter B, if it is subject to either the manifesting requirements of LAC 33:V.Chapter 11 or to the universal waste management standards of LAC 33:V.Chapter 38.

**Response**

This section does not apply as Exide does not import or export hazardous waste.

**§4107. Spills**

- A. Any spill of recyclable material which could possibly endanger human health or adversely affect the environment shall be reported to the department as provided in the "Notification Regulations and



**Response**

Exide acknowledges this requirement and will comply.

- E. The generator, transporter, reuse facility, recycle facility, or user shall clean up all of the spilled material or take such action as may be required pursuant to the Emergency Response System so that the spilled material no longer presents a hazard to human health or the environment.

**Response**

Exide acknowledges this requirement and will comply.

**§4109. Violations**

- A. No person shall accept any recyclable material unless it is delivered with a properly completed manifest as required by Subchapters A and C of this Chapter or under an Emergency Action Authorization pursuant to LAC 33:V.701.

**Response**

Exide acknowledges this requirement and will comply.

- B. No person shall dispose of a recyclable material except by bonafide use, reuse, recycling, or reclamation or by treatment, storage, or disposal as a hazardous waste in accordance with these regulations.

**Response**

Exide acknowledges this requirement and will comply.

**Subchapter A. Special Requirements for Group I Recyclable Materials**

**§4111. Applicability**

- A. Hazardous wastes that are recycled are subject to the requirements for generators, transporters, and storage facilities except for the materials listed in LAC 33:V.4105.B and C.

**Response**

Exide acknowledges this requirement and will comply.

- C. Owners or operators subject to LAC 33:V.Subpart 1 permitting requirements with hazardous waste management units that recycle hazardous wastes are subject to the requirements of LAC 33:V.Chapter 17 and Subchapters Q-R of LAC 33:V.Chapter 43.

**Response**

Exide acknowledges this requirement and will comply.

**Subchapter B. Special Requirements for Group II Recyclable Materials**

**§4117. Applicability**

The requirements of this Subchapter and all applicable provisions as provided in this Subchapter apply to industrial ethyl alcohol that is reclaimed; sludges and by products exhibiting a characteristic of a hazardous waste which are reclaimed. The following wastes are exempt from regulations:

- A. scrap metal;

**Response**

Exide purchases scrap iron only for use as furnace feed stock; however, Exide does not recycle scrap metal. Therefore, this exemption does not apply as Exide does not recycle scrap metal.

- B. fuels produced from the refining of oil-bearing hazardous wastes along with normal process streams at a petroleum refining facility if such wastes result from normal petroleum refining, production, and transportation practices;

**Response**

This exemption does not apply as Exide does not recycle fuels produced from the refining of oil-bearing hazardous wastes.

- C. oil reclaimed from hazardous waste resulting from normal petroleum refining, production, and transportation practices, which oil is to be refined along with normal process streams at a petroleum refining facility;

**Response**

This exemption does not apply as Exide does not recycle oil reclaimed from hazardous waste.

- D. coke from the iron and steel industry that contains hazardous waste from the iron and steel production process;

**Response**

This exemption does not apply as Exide does not recycle coke from the iron and steel industry.

- E. wastes described in LAC 33:V.4105.B.1-14 which are used or reused on-site or stored at the generator site prior to such use or reuse on-site are exempt from these regulations except that on-site storage shall be in an environmentally sound manner;

**Response**

This exemption does not apply as Exide does not recycle wastes described in LAC 33:V.4105.B.1-14.

- F. used batteries (or used battery cells) returned to a battery manufacturer for regeneration except for storage requirements under LAC 33:V.4119;

**Response**

Exide understands this exemption for recycling of spent batteries and will comply with applicable regulations.

- G. used oil that exhibits one or more of the characteristics of hazardous waste but is recycled in some manner other than being burned for energy recovery.



**Response**

This exemption does not apply as Exide does not recycle used oil.

**§4119. Storage**

- A. Except waste exempt in LAC 33:V.4117 all storage of recyclable materials described in LAC 33:V.4117 shall be in containers or tanks meeting the applicable standards of LAC 33:V.2103, 2105, 2107, 2109.A, 2111, and 2113, LAC 33:V.1903.A-D, 1905, 1907, and 1909 where practical except as otherwise specified in Subchapters A and C of this Chapter. Used batteries or used battery cells returned for manufacturer regeneration may be stored on pallets provided such storage contains the contents of the batteries or battery cells and is protective of human health and the environment. When it is impractical to store a recyclable material in containers or tanks, or in the manner described for used batteries or used battery cells, alternate storage acceptable to the administrative authority shall be provided by the owner of the material. The storage of all recyclable materials described in LAC 33:V.4117 must be in a manner which will prevent any release of the materials or constituents that would endanger the public health or the environment.

**Response**

Exide acknowledges this requirement and will comply.

**§4121. Manifest Forms and Shipping Documents**

- A. Manifest forms containing the information required by this Chapter shall be used for all off-site shipments, except by pipeline, of recyclable material described in LAC 33:V.4117. The manifest form must be obtained from the department.

**Response**

Exide acknowledges this requirement and will comply.

- B. Recyclable materials described in LAC 33:V.4117 may be collected and manifested on a trip ticket listing with the manifesting requirements fulfilled by the transporter. The listing shall show the identification of the transporter and reuse facility with a listing of the

**RESPONSE  
ATTACHMENT 51**

# **CHAPTER 51**

## **FEE SCHEDULES**

**§5117. Annual Monitoring and Maintenance Fees—Treaters, Storers, and/or Disposers**

- A. All annual fees provided by this Chapter shall be paid within 30 days from receipt of billing.**

**Response**

Exide acknowledges this requirement for annual fees and will comply.

**§5119. Calculation of Annual Maintenance Fees**

**Formula to apportion fees:**

**Annual Maintenance Fee = fee per site + fee per facility + fee based on volume + annual research and development fee + administrative cost fee + land disposal prohibitions fee + groundwater protection annual fee + incineration inspection and monitoring fee + boiler/industrial furnace inspection and monitoring fee + annual landfill inspection and monitoring fee + annual land treatment unsaturated zone monitoring inspection fee.**

**Response**

Exide acknowledges this requirement for annual fees and will comply.

**A. Fee per site:**

<b>Off-Site Disposer (Commercial)</b>	<b>\$79,800</b>
<b>Reclaimer (compensated for waste removed)</b>	<b>\$35,000</b>
<b>Reclaimer (uncompensated for waste removed or pays for waste removed)</b>	<b>\$25,000</b>
<b>Off-Site Disposer (Non-commercial)</b>	<b>\$20,000</b>
<b>On-Site Disposer</b>	<b>\$10,000</b>

**[NOTE: The higher fee for off-site disposal is due to the cost of the manifest system and emergency response to transport spills (neither cost is applicable to on-site disposers).]**

### Response

Exide acknowledges this section and will comply. Exide is a reclaimer (uncompensated for waste removed or pays for waste removed) with an annual fee of \$25,000.

#### **B. Fee per Hazardous Waste Facility Type**

<b>Unit Type</b>	<b>Fee</b>
<b>Storage Container/Tank/Waste Pile/etc.</b>	<b>\$ 3,273</b>
<b>Treatment Incinerator/Boiler/Industrial Furnace/Filtration Unit/etc.</b>	<b>\$ 5,270</b>
<b>Disposal Landfill/Miscellaneous Unit/etc.</b>	<b>\$ 8,270</b>

### Response

Exide has the following storage units:

Truck/Trailer Storage Area	\$3,273
Whole Battery Storage Area	\$3,273
K069/D008 Storage Area	\$3,273
Containment Building	\$3,273

Exide has the following treatment units:

Slag Stabilization Unit	\$5,270
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Exide has the following disposal units:

Closed Haz. Waste Pile #1	\$8,270
Closed Haz. Waste Pile #2	<u>\$8,270</u>

Total \$34,902

#### **C. Fee Based on Volume**

Less than 1,000 tons	\$ 1,952
Less than 10,000 tons	\$ 4,904
Less than 100,000 tons	\$ 7,856
Less than 1,000,000 tons	10,808
More than 1,000,000 tons	13,760

**Response**

Exide manages 396,250 tons per year. The fee is \$10,808.

**D. Annual Research and Development Fee**

**(Fee per site + fee per facility + fee based on volume) x 0.25 = annual research and development fee**

**Response**

The Baton Rouge Smelter is an existing facility and does not conduct research and development. This fee does not apply.

**E. Administrative Cost Fee**

**(Fee per site + fee per facility + fee based on volume) x 0.30 = Administrative Cost Fee**

**Response**

Exide has calculated the annual administrative fee as follows:

Site Fee	(\$25,000) 0.30
Facility Fee	(\$34,902) 0.30
Volume Fee	(\$10,808) 0.30
Total Administrative Fee	(\$70,710) 0.30 = \$21,213

**F. Land Disposal Prohibitions Fee. Treatment, processing (including use, reuse, recycling), and/or disposal facility annual fee (not on storage facilities). This fee applies to facilities handling wastes subject to the land disposal prohibitions in LAC 33:V.Chapter 22.**

On-Site	\$1,000
Off-Site Non-commercial	\$2,000
Reclaimer	\$2,500
Off-Site Commercial	\$5,000

**Response**

Exide does not land dispose waste; therefore this fee does not apply.

- G. Groundwater Protection Fee (applies only to sites with groundwater monitoring) in accordance with LAC 33:V.5139.**

**Response**

Exide acknowledges this requirement and will comply.

- H. Incinerator and Boiler/Industrial Furnace Inspection and Monitoring Fee in accordance with LAC 33:V.5141.**

**Response**

Exide does not operate an incinerator or boiler/industrial furnace; therefore this fee does not apply.

- I. Annual Landfill Inspection and Monitoring Fee in accordance with LAC 33:V.5143.**

**Response**

Exide does not operate a hazardous waste landfill; therefore this fee does not apply.

- J. Annual Land Treatment Unsaturated Zone Monitoring Inspection Fee in accordance with LAC 33:V.5145.**

**Response**

Exide does not conduct land treatment; therefore this fee does not apply.

**§5120. Land Disposal Prohibition Petition Fees**

- A. Petitions submitted in accordance with R.S. 30:2193(E)(2) and/or LAC 33:V.Chapter 22 are subject to additional fees as noted below for each petition submitted. These fees must be submitted at the time a petition is submitted.**

**RESPONSE  
ATTACHMENT A2**



## **APPENDIX 2**

### **CERTIFICATION STATEMENT**

## CERTIFICATION STATEMENT

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision according to a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.



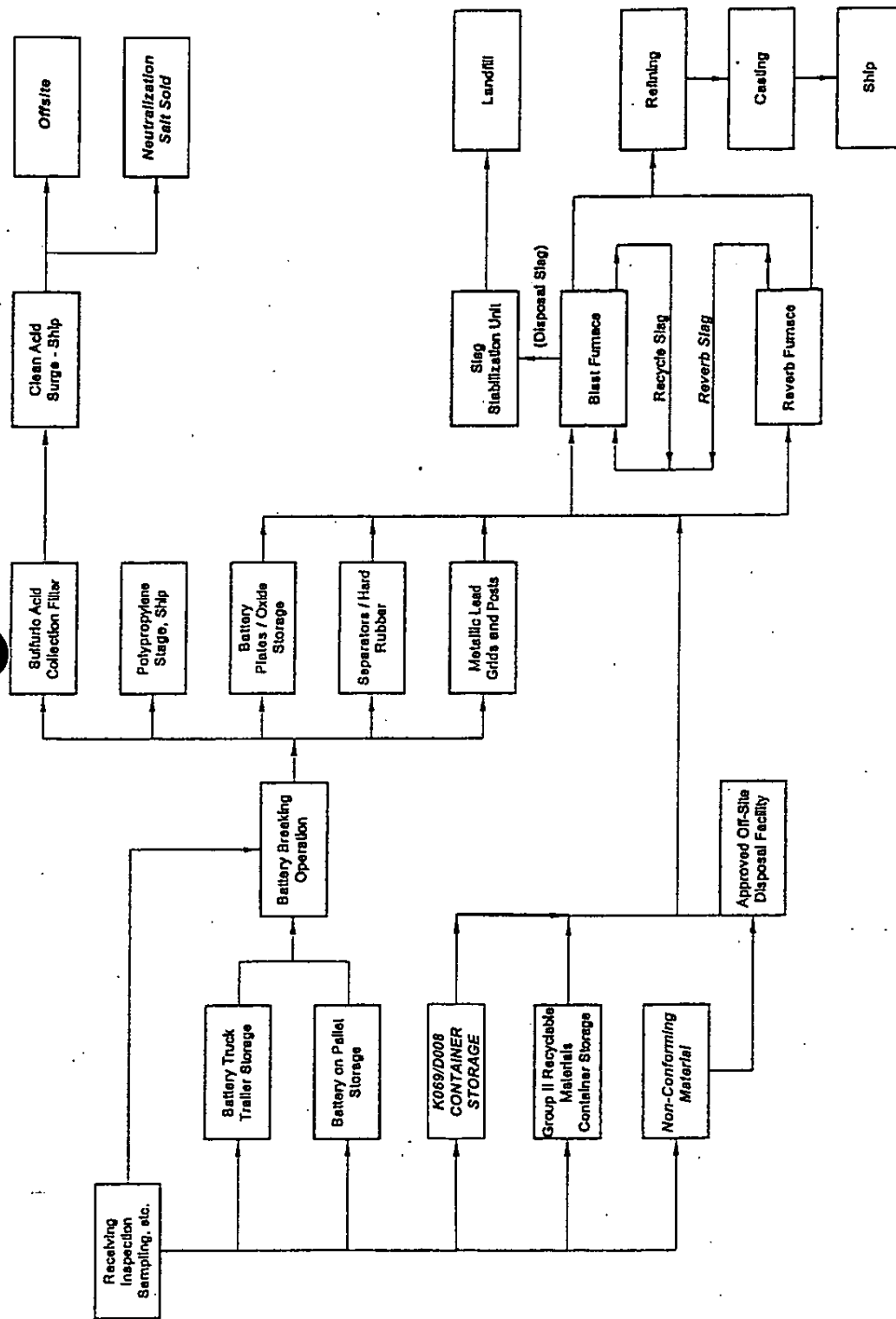
Tim Harris

10/4/06

Date

Plant Manager, Baton Rouge Facility  
Exide Technologies

**RESPONSE  
ATTACHMENT F**



# EXIDE TECHNOLOGIES

## BATON ROUGE, LOUISIANA

NOTES:

TAKEN FROM PROVIDENCE PART B PERMIT MODIFICATION  
DRAWING 028-001-A005 DATE 05/08/01

### PROCESS FLOW DIAGRAM

Scale:	N.T.S.
Originated By:	K.A.W.
Drawn By:	P.S.G.
Checked By:	J.W.P.
Project Mgr:	P.G.S.
Dwg. No.	2003-1058-03-10



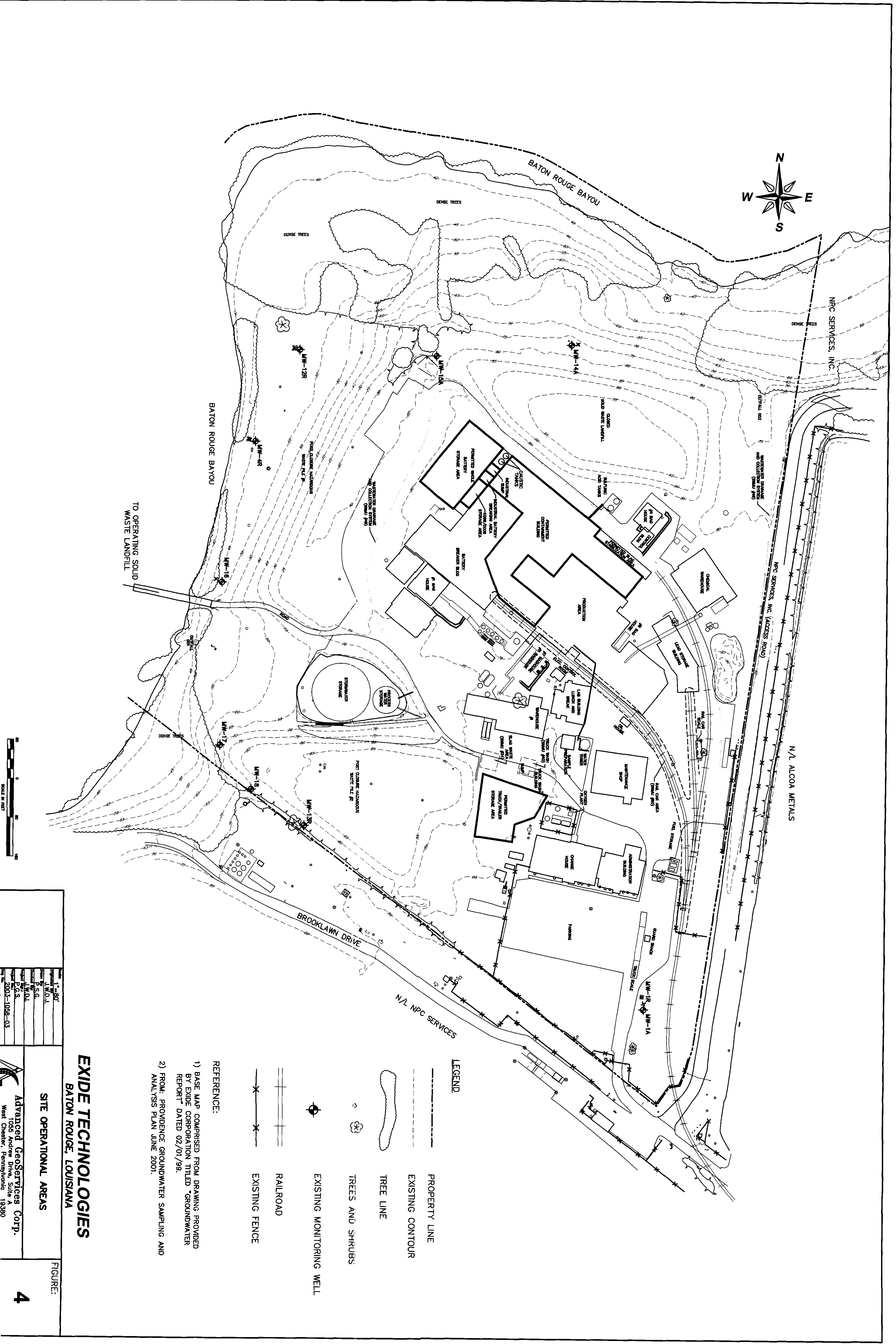
Advanced GeoServices Corp.  
1055 Andrew Drive, Suite A  
West Chester, Pennsylvania 19380  
(610) 840-9100  
FAX: (610) 840-9199

FIGURE: 1

2003-1058-03

04 23

J:\EXIDE\DRAWINGS\BATON ROUGE\2003-1058-03\2003-1058-03-10



**EXIDE TECHNOLOGIES**  
**BATON ROUGE, LOUISIANA**

Site OPERATIONAL AREAS

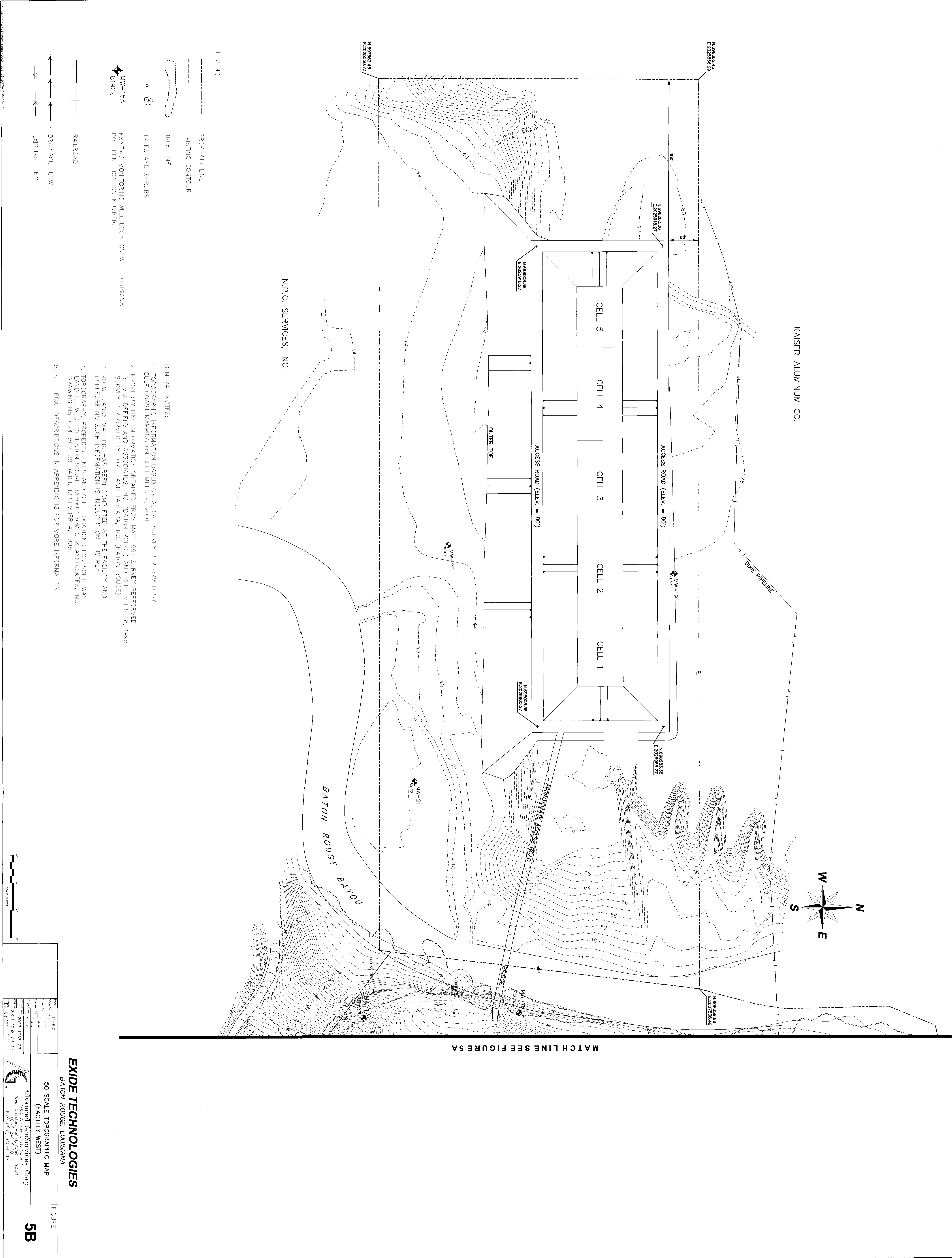
Advanced GeoServices Corp.  
1555 Andrew Drive, Suite A  
West Chester, Pennsylvania 19380

FIGURE:  
**4**

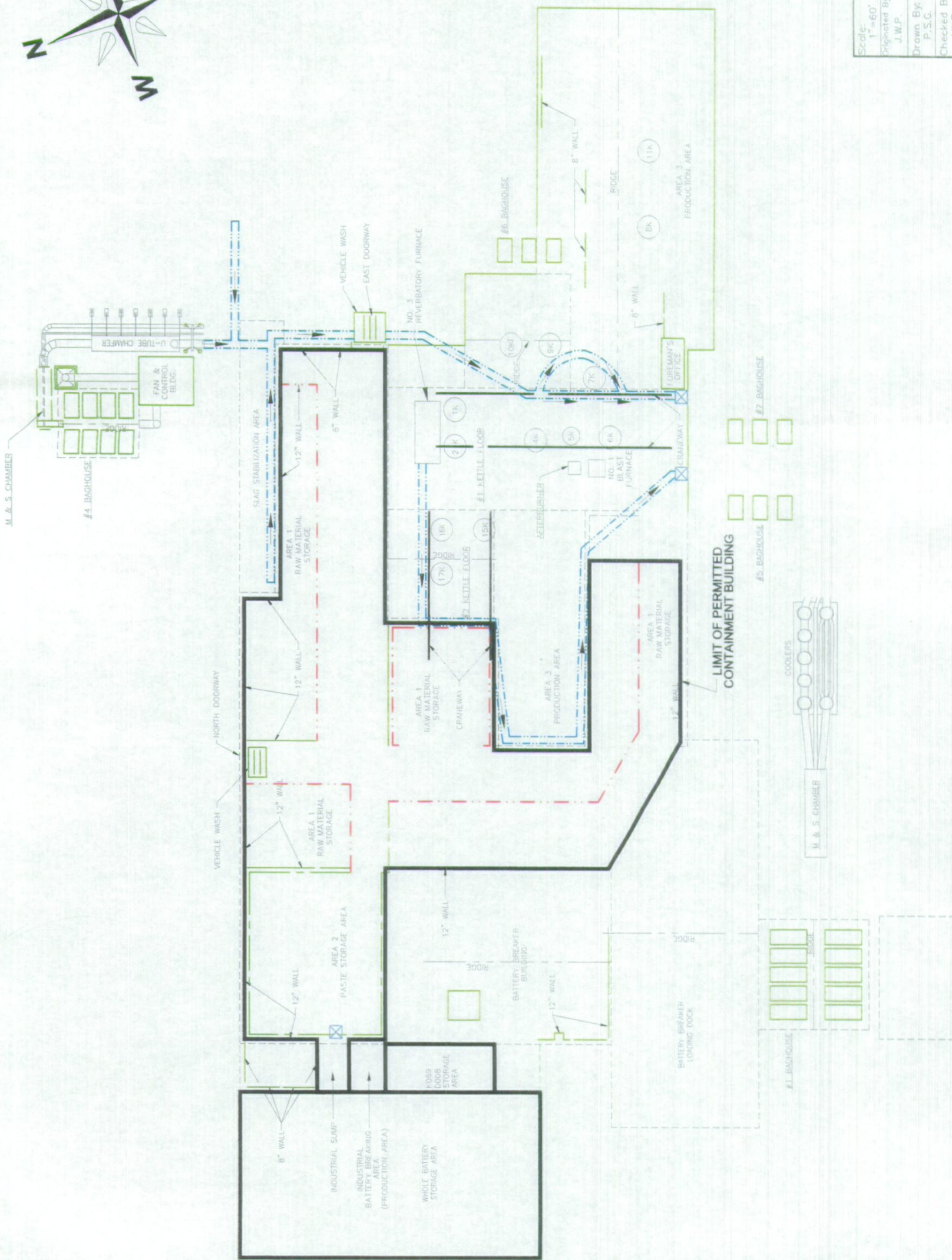
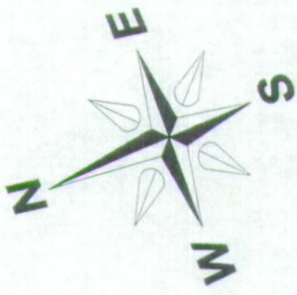












**Legend**

- Area 1 Raw Material Storage Areas
- Area 2 Paste Storage Area
- Area 3 Production Area
- Water Collection Sump
- Floor Drain
- Water Flow

**Notes:**

- Base map comprised from Exide Corporation drawing titled "Containment Building" for the Hazardous Waste Containment Building Certification drawing no. B24-810-01 drawn by C-K Associates, Inc. dated 11/03/99.
- Area 2 sump location from Providence Engineering as-built dated November 19, 2003.



**EXIDE TECHNOLOGIES**  
BATON ROUGE, LOUISIANA

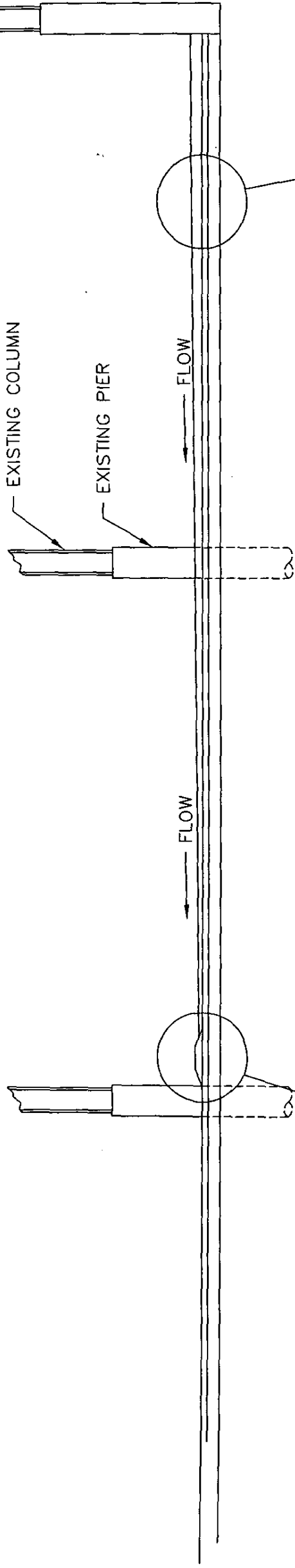
CONTAINMENT BUILDING MAP

Advanced GeoServices Corp.  
1055 Andrew Drive Suite A  
West Chester, Pennsylvania 19380  
(610) 840-9100  
FAX: (610) 840-9199

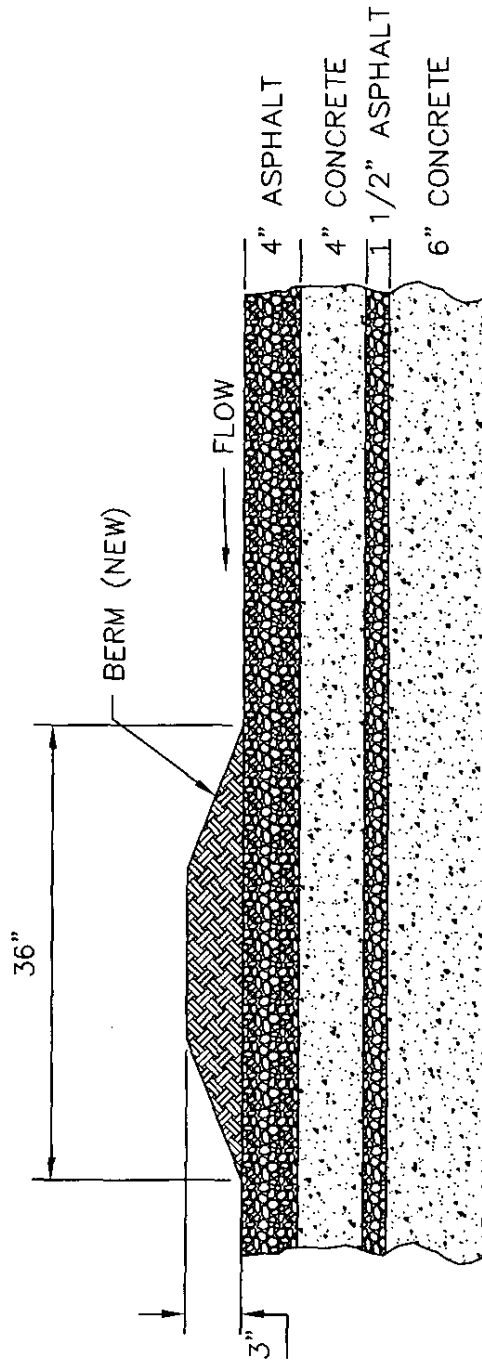
Project No. 2003-1058-03-09  
**OCT 04 2006**

FIGURE: 6

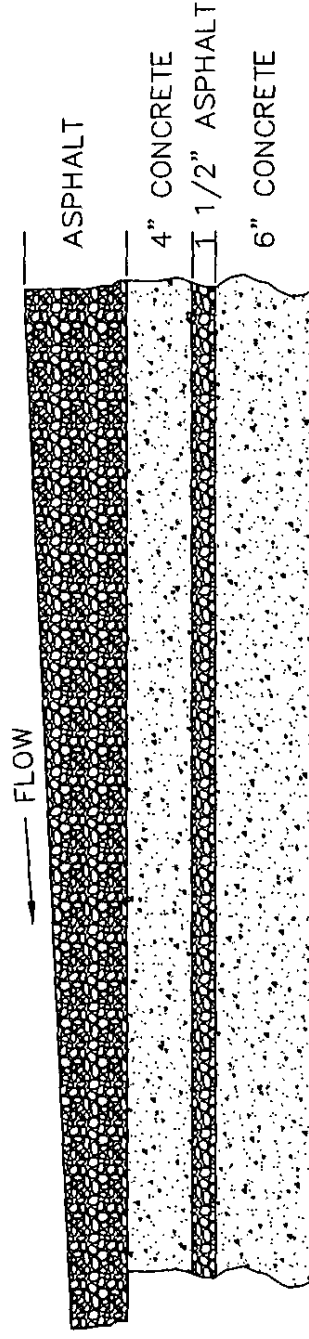




CROSS-SECTION COL. LINE 8  
1/8" = 1'-0"



TYPICAL BERM CROSS-SECTION  
1" = 1'-0"



TYPICAL FLOOR CROSS-SECTION  
1" = 1'-0"

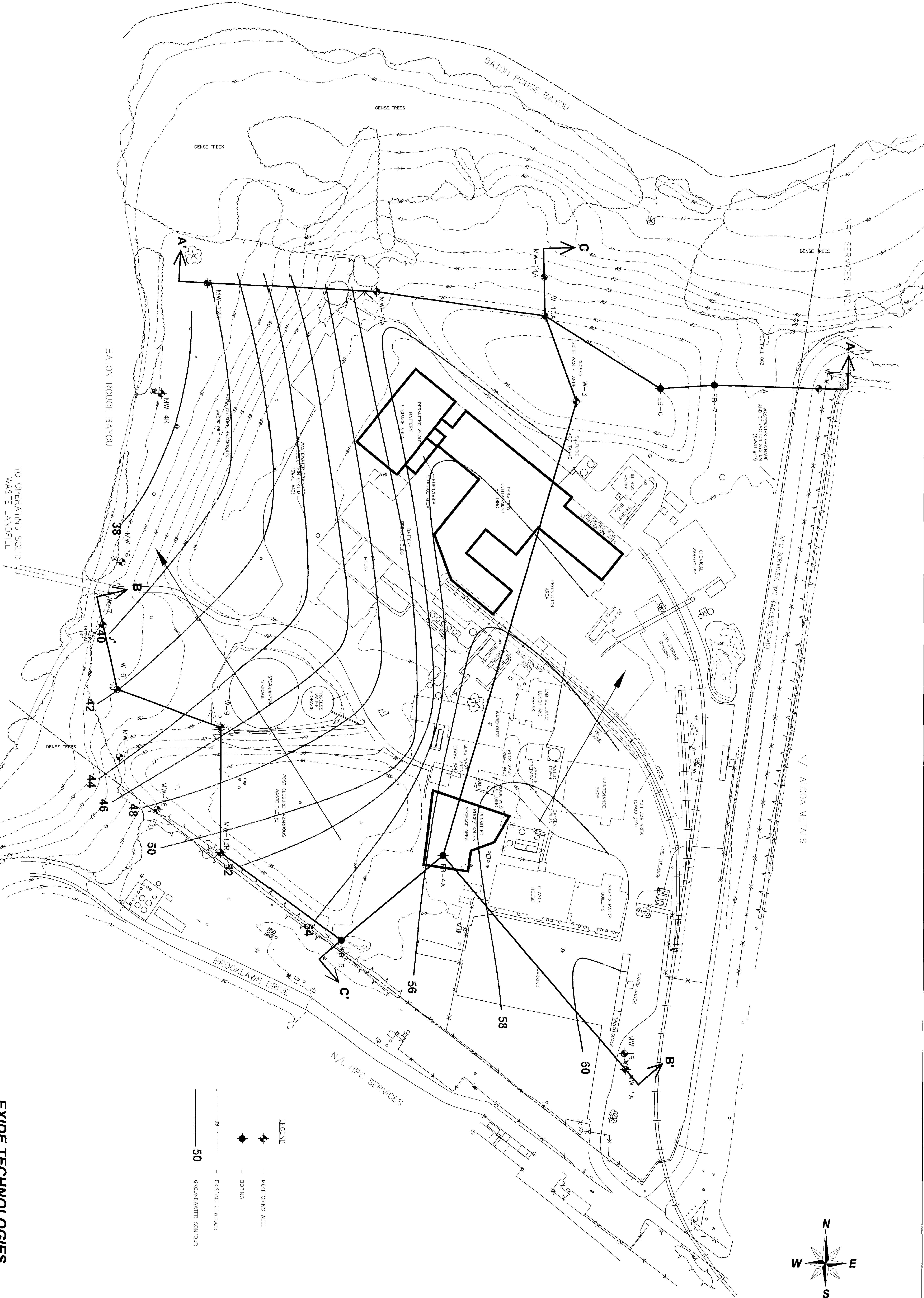
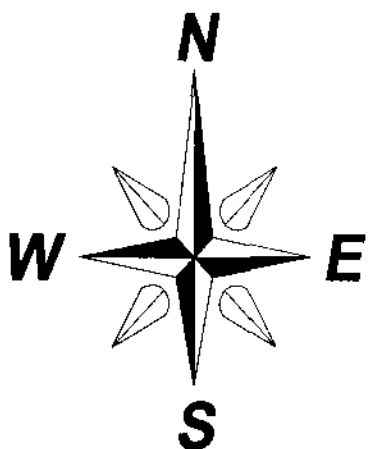
NOTES:

1. ORIGINAL DRAWING BY PAT B. ROY DATED MAY 1991, DRAWING NO. MS-2L.

**EXIDE TECHNOLOGIES**  
BATON ROUGE, LOUISIANA

Scale: AS SHOWN	K069 / D008 CONTAINER STORAGE AREA
Designed By: J.W.P.	
Drawn By: P.S.G.	
Checked By: J.W.P.	
Project Mgr: P.G.S.	
Dwg. No. 2003-1058-03-11	
Project No. 2003-1058-03	
FIGURE: 11	

**Advanced GeoServices Corp.**  
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West Chester, Pennsylvania 19380  
(610) 840-9100  
FAX: (610) 840-9199



EXIDE TECHNOLOGIES

BATON ROUGE, LOUISIANA

POTENTIOMETRIC MAP

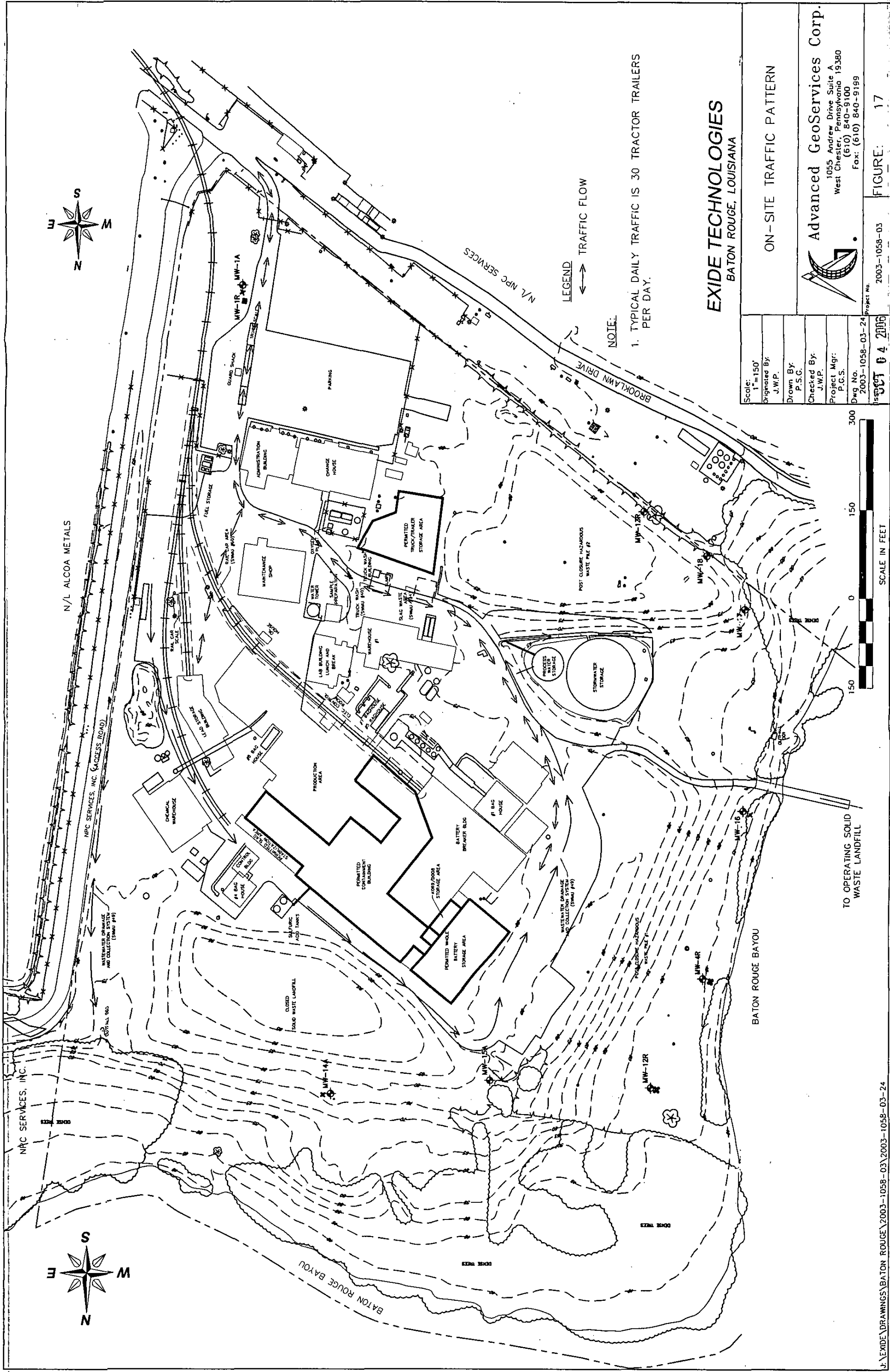
JUNE 2004

Advanced Geoservices Corp.

West Chester, Pennsylvania 19380

FIGURE:

14



**RESPONSE  
ATTACHMENT A6**

## **APPENDIX 6**

# **RCRA CONTINGENCY PLAN AND EMERGENCY RESPONSE PLAN**

**RCRA CONTINGENCY AND  
EMERGENCY RESPONSE PLAN**

**SPILL PREVENTION  
CONTROL AND  
COUNTERMEASURE PLAN  
&  
STORM WATER POLLUTION  
PREVENTION PLAN**

**EXIDE TECHNOLOGIES  
BATON ROUGE SMELTER FACILITY  
2400 BROOKLAWN DRIVE  
BATON ROUGE, LOUISIANA**

**September 18, 2006**

**RCRA CONTINGENCY AND EMERGENCY RESPONSE PLAN**

**SPILL PREVENTION CONTROL  
AND COUNTERMEASURE PLAN  
&  
STORM WATER POLLUTION PREVENTION PLAN**

**EXIDE TECHNOLOGIES  
BATON ROUGE SMELTER FACILITY  
2400 BROOKLAWN DRIVE  
BATON ROUGE, LOUISIANA 70807**

**September 18, 2006**

## **DISTRIBUTION LIST**

### **RCRA CONTINGENCY AND EMERGENCY RESPONSE PLAN**

### **SPILL PREVENTION AND CONTROL PLAN**

**&**

### **STORM WATER POLLUTION PREVENTION PLAN**

- Tim Harris, Plant Manager
- Edward Hardy, Environmental Manager
- Mike Parker – EH&S Manager
- Craig Simpson – Plant Engineer



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Table 1	Inventory of Storage Tanks
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	Figure 3	Storage Tank Locations, Site Drainage, and Storm Water Discharge Location
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Appendix D	Substantial Harm Checklist	
Appendix E	Spill Contingency Plan Assessment	
Appendix F	Discharge Information Report and Contact List	
Appendix G	Storm Water Pollution Prevention Plan	
Appendix H	Hazardous Waste Inspection Plan and Forms	
Appendix I	Containment Structure Requirements and Guidelines	

## 1.0 INTRODUCTION

Federal regulations promulgated on January 10, 1974 [Code of Federal Regulations, Title 40, Part 112 (40 CFR 112)] and revised on July 17, 2002, require the preparation and implementation of a Spill Prevention Control and Countermeasure (SPCC) Plan for all non-transportation-related facilities which have the potential to discharge oil or oil-related substances to the navigable waters of the United States or adjoining shorelines. The State of Louisiana promulgated similar spill prevention regulations in November 1985 [Louisiana Administrative Code, Title 33, Part IX (LAC 33:IX), Chapter 9]. However, the state regulations apply not only to oil and oil-related substances but also to hazardous materials listed in the Notification Regulations and Procedures for Unauthorized Discharges published by the Louisiana Department of Environmental Quality (DEQ). Under these regulations, applicable facilities must prepare and implement a Spill Prevention and Control (SPC) Plan. The combination of the state and federal requirements will be jointly referred to in this Plan as SPCC.

This document incorporates the requirements of the existing LPDES permit to develop, implement and maintain a Storm Water Pollution Prevention Plan, SWPPP. There are no separate storm water treatment systems on site for storm water, nor is there any uncontrolled contaminated storm water runoff. The LPDES permit requires collection and treatment of the first-flush storm water runoff (first 1 inch of precipitation that falls within the production area of plant). Storm water that is commingled with process wastewaters is collected as part of the wastewater treatment system and is treated to the full extent that process wastewater is treated before discharge. The SWPPP applicable work sheets can be found in Appendix G.

The SPCC rule applied to owners or operators of facilities that drill, produce, gather, store, use, process, refine, transfer, distribute, or consume oil and oil products. The new rule (July 17, 2002) clarifies applicability to owners or operators that use oil in quantities that may be harmful. The changes also allow for tracking the scope of the rule to conform with the expanded jurisdiction of the amended Clean Water Act (CWA).

The provisions of LAC 33:IX Chapter 9 apply to facilities with minimum aboveground storage capacity of oil or regulated materials of 1,320 gallons for two or more individual containers in aggregate, within a common storage area, or 660 gallons for an individual container.

The federal regulations contained in 40 CFR Part 112 include similar applicability requirements of the state regulations except that the federal regulations only apply to the storage of oil or other petroleum products and only apply to facilities with an aggregate aboveground storage capacity of oil greater than 1,320 gallons and only containers of oil with a capacity of 55 gallons or greater are counted for the storage of oil or other petroleum products. Since the Baton Rouge smelter facility has a total storage capacity of oil greater than the specified limits, the facility must comply with both the SPCC and SPC regulations. This SPCC Plan has been prepared in a manner as to satisfy the requirements of both the federal and state spill prevention regulations.

This SPCC Plan uses the state regulations of LAC 33:IX Chapter 9 and the federal regulations of 40 CFR Part 112 as guidance documents and provides appropriate responses. Appropriate appendices and figures are also contained in this plan. Figures included are Figure 1 - Site Location Map, Figure 2 - Site Topographic Map, and Figure 3 - Storage

Tank Locations, Site Drainage, and Storm Water Discharge Location (see Appendix A). Appendix B, Inspection Record Forms, contains copies of the inspection forms and Appendix C, Regulatory Applicability, provides a listing of the applicable state and federal regulations and reportable quantities for unauthorized. Appendix D, Substantial Harm Checklist, provides a listing of the federal requirements that could directly impact the environment or waterways. Appendix E, Spill Contingency Plan Assessment, contains spill assessment guidelines and Appendix F, Discharge Information Report and Contact List, contains a copy of the necessary steps needed in reporting a spill and the appropriate personnel to contact in the event of a spill. Appendix G, Storm Water Pollution Prevention Plan, outlines pollution prevention measures, Appendix H, Hazardous Waste Inspection Plan and Forms, addresses hazardous substance/waste management requirements, and Appendix I, Containment Structure Requirements and Guidelines, outlines requirements for construction of secondary containments. Management Approval of the plan is provided in Section 4.0, Management Approval.

The primary objective of the SPCC Plan is to prevent any oil or hazardous substance/waste from reaching navigable waters. This plan is designed to familiarize oil and hazardous material/waste handling personnel at the Baton Rouge smelter facility to areas with the potential for a spill, the procedures used to respond to a spill and the methods and procedures used to inspect equipment so that the risk of an accidental spill is reduced.

Also, in accordance with 40 CFR Part 112, this SPCC Plan has been certified by a Registered Professional Engineer attesting to the fact that the Professional Engineer or his agent has examined the facility and is familiar with the provisions of the applicable regulations and that the plan has been prepared in accordance with good engineering practices. Certification is provided in Section 5.0.

In accordance with LAC 33:IX.905.C of the state regulations, complete copies of this SPCC Plan are maintained at the Baton Rouge smelter facility. The Plan is available to authorized representatives of the Environmental Protection Agency (EPA) and LDEQ for on-site review during normal working hours.

As required by LAC 33:IX.905.E, this SPCC Plan will be amended when there is a modification in facility design, construction, storage capacity, operation, or maintenance, which renders this SPCC Plan inadequate. Title 40 of the CFR Part 112.5(c) requires a Professional Engineer to certify any technical amendments.

In accordance with LAC 33:IX.905.F, this SPCC Plan is also reviewed every three years and is amended within 90 days of the review to include more effective prevention and control technologies if such technologies significantly reduce the likelihood of a spill event or if such technologies have been field-proven at the time of the review. This review period is more stringent than the 40 CFR Part 112 regulations and will be conducted as required.

The plan also fulfills 29 CFR 1910.120, 40 CFR 262, 264 & 265 and LAC 33:V.1513 RCRA Contingency Plan requirements.

As a part of preparing this plan a record of revisions has been included within this section.

## DOCUMENTATION OF REVIEW AND EVALUATION

In accordance with LAC 33:IX.905.F, this SPCC Plan is also reviewed every three years and is amended within 90 days of the review to include more effective prevention and control technologies if such technologies significantly reduce the likelihood of a spill event or if such technologies have been field-proven at the time of the review. This review period is more stringent than the 40 CFR Part 112 regulations and will be conducted as required.

Also, as required by LAC 33:IX.905.E, this SPCC Plan is amended whenever there is a modification in facility design, construction, storage capacity, operation, or maintenance, which renders this SPCC Plan inadequate. Title 40 of the CFR Part 112.5(c) states, "Have a Professional Engineer certify any technical amendment to your plan in accordance with section 112.3(d)." Therefore, the amendment is prepared prior to or concurrent with the facility modification, and is certified as required.

Date	Page	Nature of Change	Authorized Signature:
6/7/95	Document	Revision of Personnel	Glen Hasse
5/4/98	Document	Review of Plan (3 year)	James Parise
5/31/00	Document	Revision of Personnel	Steve Krul
7/6/00	Document	Revision of Tank List	Steve Krul
6/6/01	Document	Revision of Plan (3 year)	Steve Krul
12/12/02	Document	Revision of Personnel	Steve Krul
8/25/05	Document	Revision of Personnel	Tim Harris
9/15/06	Document	Revision of Plan (3 year)	Edward Hardy

## **2.0 GENERAL REQUIREMENTS – 40 CFR 112.7**

### **2.1 Overview of Facility Conformance – 40 CFR 112.7(a)**

Each facility must have a designated person who is accountable for spill prevention who reports to management. The Environmental Manager is accountable for spill prevention & storm water pollution prevention.

#### **2.1.1 Deviations – 40 CFR 112.7(a)(2)**

Provide an explanation of any deviations from the requirements of the required regulations, and where applicable describe in detail alternate methods and how you will achieve equivalent environmental protection – 40 CFR 112.7(a)(2).

Baton Rouge smelter facility operations does not deviate from any portions of the requirements as specified in this plan.

#### **2.1.2 Facility Description - 112.7(a)(3)**

**Facility Location:** Exide's Baton Rouge smelter facility is located at the end of Brooklawn Drive, in the northeast portion of Baton Rouge, Louisiana. The coordinates for the facility are West Latitude 30° 35' 08"; North Longitude 91° 14' 40". The smelter has been in operations at this location since 1969. The site comprises approximately 33 acres and is zoned industrial. Baton Rouge Bayou makes up the north and western boundaries of the site. Great Lakes Carbon is on the east side of the site and NPC Services, Inc. is located across from Brooklawn Drive south of the site. A map showing the geographic location of the site is found as **Figure 1, Site Location Map**.

**Date of Initial Operation:** Exide's Baton Rouge smelter facility began operations in 1969.

**Description of facility including an indication of the nearest potential receiving waters:**

The facility is a secondary lead smelter and refinery which recycles spent lead-acid batteries and inorganic lead-bearing wastes into metallic lead, in the form of lead pig and block ingots. The product lead is sold to customers for use in making batteries, weights, bearings, ammunition, and chemicals. The facility is regulated as a recycling facility under the Resource Conservation and Recovery Act (RCRA).

Some of the raw materials used in the process and stored on site are classified as hazardous wastes by regulation. Exide was issued a Hazardous Waste Permit (LAD008184137) to operate three container storage areas (the Truck/trailer Storage area, the K069/D008 Storage area and the Whole Battery Storage area). Exide operates a Containment Building, which is currently under interim status. A hazardous waste treatment unit, the Slag Stabilization unit, is also permitted under LAD008184137.

Lead acid batteries are either fed directly into the battery breaker or are stored temporarily at the truck/trailer storage area and the Whole Battery Storage area. Lead acid batteries are processed in the battery breaker unit, by cutting the batteries, and hydraulically separating the individual components. The plastic is thoroughly washed to remove residual acid and lead. It is then loaded into trailers and shipped offsite for recycling. The battery acid, a weak

sulfuric acid solution, is neutralized with sodium hydroxide and crystallized to form sodium sulfate salt. The salt is sold as a product. The lead material from the batteries is processed to convert lead sulfate to lead oxide. The lead oxide paste is then stored in the containment building prior to recycling.

The facility operates one blast furnace and one reverberatory furnace that are used to smelt the lead-bearing raw materials. The molten lead is cast either into ingots using two casting machines or blocks using molds. The finished lead is tested to determine if it meets client specifications and is then loaded into trucks and transported off-site for reuse.

As a part of the lead recycling, a blast furnace slag is generated. This slag is allowed to cool, crushed to small diameter, and treated using a mixture of cement and sodium silicate, as specified in Exide's Hazardous Waste Permit. The stabilized slag is rock-like in appearance and engineering properties. After treatment, the slag is placed in a permitted onsite solid waste landfill. **Figure 2, Site Topographic Map** shows area drainage. **Figure 3, Storage Tank Locations, Site Drainage, and Storm Water Discharge Location**, is a map of the facility with storage tanks and process areas locations, storm water and process area storm water runoff direction, and storm water runoff collection and treatment system. The surface drainage from the facility flows into Baton Rouge Bayou.

**Identity, amount, and location of applicable substances stored at the facility - 112.7(a)(3)(i):** An inventory of the storage tanks, containers, and drums located at the facility are presented in **Table 1, Inventory of Storage Tanks**. It contains the substance, tank or container volume, and the presence of containment for each storage tank. Locations of all tanks and drum storage areas are found in **Figure 2, Storage Tank Locations**.

**Discharge prevention measures for routine handling of products (loading, unloading, and facility transfers, etc.) - 112.7(a)(3)(ii):** The procedures established for tank truck unloading for regulated hazardous materials is in accordance with the U.S. Department of Transportation (DOT) requirements and regulations. In addition, SPCC and spill prevention training is conducted annually to reinforce awareness regarding spill prevention and control. The stormwater and process systems drain to the WWT and will contain any spill that may occur. Unloading racks and pipelines are regularly inspected for deficiencies and trucks/ rail cars are inspected for leaks or damage before leaving the facility. Mobile equipment leaks and spills located outside of the combined stormwater control system will be contained by absorbent materials and cleaned up.

**Discharge or drainage controls such as secondary containment around containers and other structures, equipment, and procedures for the control of a discharge - 112.7(a)(3)(iii):** Secondary containment in the form of dikes or curbs contain most of the onsite storage tanks and containers. Any spills that occur at storage tanks or containers that are not diked or curbed are routed to a process sewer system and then to the wastewater treatment system. Spills will be either contained at the vessel or collected by the stormwater collection systems and routed to the wastewater treatment system. After treatment, treated wastewater is discharged at a permitted outfall. Storage tanks or containers located outside of the process area are provided with adequate secondary containment.

**Countermeasures for discharge discovery, response, and cleanup (both the facility's capability and those that might be required of a contractor) – 112.7(a)(3)(iv):** The facility has response equipment and supplies stored in the storeroom. This includes absorbent booms, absorbent, barricade tape, personal protective equipment, and other response equipment that can be used. **Table 2, Emergency Response Equipment,** lists available emergency response equipment. In the event of an emergency situation that would require outside assistance, the emergency response contractor will be called.

**Methods of disposal of recovered material in accordance with applicable legal requirements – 112.7(a)(3)(v):** Spilled non-hazardous materials and hazardous materials not meeting the hazardous waste definition spilled to stormwater collection systems are treated within the wastewater treatment system. Spills recovered by absorbent materials or other cleanup methods will be handled as waste and disposed of or recycled in accordance with applicable regulations.

Spills of hazardous materials meeting the hazardous waste definition will be recycled through the facility process or collected, recovered and stored for proper disposal. Other waste material such as personal protective clothing, or cleanup debris, which is contaminated during cleanup operations will be characterized and disposed in accordance with federal, state, and local waste disposal regulations.

**Contact list and phone numbers for the facility response coordinator, National Response Center, Response Contractors, and all appropriate Federal, State, and local agencies to notify in the event of a discharge– 112.7(a)(3)(vi):** A listing of emergency contacts and phone numbers can be found in **Appendix F.** There is an active Emergency Response & Evacuation Action Plan maintained at the facility.

### **2.1.3 Release Notification Procedure – 40 CFR 112.7(a)(4)**

**Unless you have submitted a response plan under 40 CFR 112.20, provide information and procedures in your plan to enable a person reporting a discharge as described in 40 CFR 112.1(b) to relate information on the exact address or location and phone number of the facility; the date and time of the discharge, the type of material discharged; estimates of the total quantity discharged; estimates of the quantity discharge as described in 40 CFR 112.1(b); the source of the discharge; a description of all affected media; the cause of the discharge; any damages or injuries caused by the discharge; actions being used to stop, remove, and mitigate the effects of the discharge; whether an evacuation may be needed; and the names of individuals and/or organization who have been contacted:** A discharge information report form is provided in **Appendix F** in this report. The report form provides all the necessary information needed to report a discharge.

The Environmental Manager or designee will investigate the situation promptly and determine if the quantity of oil or material spilled adversely affects public health and welfare and is of sufficient magnitude to be considered a safety hazard and/or pollution problem. The Environmental Manager or designee will immediately take corrective action if the Baton Rouge facility is the source of pollution.

Whenever your facility has discharged more than 1000 U.S. gallons of oil in a single discharge as described in 112.1(b), or discharged more than two 42 U.S. gallons of oil in each of two discharges as described in 112.1(b), occurring within any 12 month period, submit the following information to the Regional Administrator within 60 days:

- 1) Name of your facility
- 2) Your name
- 3) Location of the facility
- 4) Maximum storage or handling capacity of the facility and normal daily throughput
- 5) Corrective action and countermeasures you have taken, including a description of equipment repairs and replacements
- 6) An adequate description of the facility, including maps, flow diagrams, and topographical maps as necessary
- 7) The cause of such a discharge
- 8) Additional preventative measures you have taken or contemplated to minimize the possibility of reoccurrence
- 9) Other information deemed pertinent by the Regional Administrator related to this plan or discharge

All discharges at the Baton Rouge facility that fall under this section of the plan will be reported in this manner. A copy of the Discharge Information Report is provided in **Appendix F** and should be used to report all spills associated with this rule.

In addition to submitting the above information to the Regional Administrator, any spill which exceeds the reporting threshold will be immediately reported to all applicable agencies including, but not limited to:

- Louisiana State Police-- 24-hour emergency hotline - (225) 925-6595
- Louisiana Department of Environmental Quality - (225) 342-1234 (24-hr)
- National Response Center -- 1-800-424-8802

#### **2.1.4 Release Containment Procedures -- 40 CFR 112.7(a)(5)**

Unless you have submitted a response plan under 112.20, organize portions of the Plan describing procedures you will use when a discharge occurs in a way that will make them readily usable in an emergency, and include appropriate supporting material as appendices. The facility has response equipment and supplies stored in the storeroom. This includes absorbent booms, absorbent, barricade tape, personal protective equipment, and other response equipment that can be used. **Table 2, Emergency Response Equipment**, lists available emergency response equipment. In the event of an emergency situation that would require outside assistance, the emergency response contractor will be called.

#### **2.2 Potential Discharge Due to Equipment Failure -- 40 CFR 112.7(b)**

Prediction of the direction, rate of flow, and total quantity of applicable substances which could be spilled at the facility where experience indicates a reasonable potential for equipment failure and/or human error:



Pipelines: A spill occurring from the pipelines will be contained by the combined stormwater/process area control system.

Aboveground Storage/Process Tanks: Oil and hazardous material storage tanks have sufficient secondary containment. Curbing and the combined stormwater/process area control system will serve as containment for non-hazardous material/ waste storage in the event of a spill.

Unloading Racks: Unloading racks have drainage systems that also are routed to the process area control system.

Underground Lines: Leaks from underground lines will be contained by constructed berms and sumps and will be pumped to the wastewater treatment system.

### **2.3 Secondary Containment And/Or Diversionary Structures – 40 CFR 112.7(c)**

Provide appropriate containment and/or diversionary structures or equipment to prevent a discharge of a harmful quantity of oil. The entire containment system, including walls and floor, must be capable of containing oil and must be constructed so that any discharge from a primary containment system, such as a tank or pipe, will not escape the containment system before cleanup occurs. At a minimum, you must use one of the following prevention systems or its equivalent:

#### **Used by Facility:**

Yes No

- |                                     |                                     |   |
|-------------------------------------|-------------------------------------|---|
| <input checked="" type="checkbox"/> | <input type="checkbox"/>            | dikes, berms, or retaining walls sufficiently impervious to contain spills; |
| <input checked="" type="checkbox"/> | <input type="checkbox"/>            | curbing;  |
| <input checked="" type="checkbox"/> | <input type="checkbox"/>            | culverts, gutters, or other drainage systems;                               |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | weirs, booms, or other barriers;  |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | spill diversion ponds;  |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | retention ponds; or   |
| <input checked="" type="checkbox"/> | <input type="checkbox"/>            | sorbent substances  |

**Additional comments:** The Baton Rouge smelter facility is equipped with proper containment and drainage facilities to contain and control a spill in order to limit the threat of harm to human health and the environment. Containment structure requirements and

guidelines are identified in **Appendix I**. The following equipment and procedures provide containment and drainage protection:

- Unloading areas for trucks are conducted in paved areas that drain into the wastewater treatment system.
- Containment structures for storage tanks at the smelter facility are constructed of materials which are sufficiently impervious and can contain spilled materials
- Appropriate containment and diversionary equipment are in place at the smelter facility to prevent a spill of an applicable substance from reaching the waters of the State
- Sorbents, boom, and other cleanup materials are stored on site for immediate access

#### **2.4 Secondary Containment Deviation, Tank Testing, and Contingency Plan – 40 CFR 112.7(d)**

**Conduct both periodic integrity testing of the containers and periodic integrity and leak testing of the valves and piping.** Visual inspections are conducted continuously and work orders are written for repairs on an as needed basis if deficiencies are found. Formal visual inspections are conducted monthly and recorded. Totes and drums located at the smelter facility are provided by the product manufacturer in accordance with DOT regulations. Internal visual tank inspections are documented on an as needed basis. Visual inspection records are filed with the individual maintenance planner and integrity-testing inspections are filed in the engineering/maintenance records for a period of three years.

**Unless you have submitted a response plan, provide a strong spill contingency plan, including a written commitment of the manpower, equipment, and materials required to ensure timely and effective action to minimize damage resulting from a spill event.**

There is an active Emergency Response & Evacuation Plan maintained. The EREP describes Haz-Mat/Fire Brigade Team responsibilities and response equipment. See **Appendix E** for Spill Contingency Plan Assessment guidelines.

#### **2.5 Inspection, Tests, And Records – 40 CFR 112.7(e)**

**The plan shall provide for inspections required by this Chapter and this Part. Inspections shall be in accordance with written procedures developed for the facility by the operator. These written procedures and a record of the inspections shall be part of the plan. Inspection records shall be signed or initialed by the inspector, appropriate supervisor or the facility designee, and shall be retained for a minimum of three years:** Formal facility inspections are conducted monthly for storm water discharge areas by the environmental department, monthly for applicable tanks and containments within individual department ownership/control, and after each rain event or once per month for containments located outside the wastewater treatment system by environmental department. These inspections are documented using the inspection forms found in **Appendix B**. Procedures and instructions are found on the forms. The report forms will be signed and dated by the inspector and kept on file at the department conducting inspection or the Environmental Office for a minimum of five years (state).

## **2.6 Personnel Training And Spill Prevention Procedures – 40 CFR 112.7(f)**

**Instruct oil-handling personnel in the operation and maintenance of equipment to prevent or contain discharges; discharge procedure protocols; applicable pollution control laws, rules, and regulations; general facility operations; and the contents of the facility SPCC Plan.** Appropriate training and instruction will be conducted for oil handling personnel in the areas of:

1. Operation and maintenance of equipment to prevent discharges.
2. Applicable pollution control laws, rules, and regulations.
3. The facility SPCC Plan.
4. Inspection procedures.
5. Responsibilities in the notification process in the event of a spill.
6. All changes pertaining to the above items.

New personnel will be trained as they assume responsibilities that include the handling of petroleum products and hazardous materials. Spill prevention briefings will be conducted on a regular basis (minimally annual) in association with safety training at the facility. Training records for employees shall be kept on file at the Baton Rouge facility.

All other employees will be trained annually to address spill reporting notification, good housekeeping, & material management. This training will combine hazardous waste contingency, SPCC, and SWPPP requirements.

**Each facility must have a designated person who is accountable for spill prevention who reports to line management – 112.7(f)(2):** The person designated for spill control is the Environmental Manager.

**Schedule and conduct discharge prevention briefings for oil-handling personnel and appropriate contractors at least once a year to assure adequate understanding of the SPCC for that facility. Such briefings shall highlight and describe known spill events or failures, malfunctioning components, and recently developed precautionary measures – 112.7(f)(3):** Training is conducted as described above.

## **2.7 Security – 40 CFR 112.7(g)**

**The plant shall be fully fenced and entrance gates are locked and/or guarded when the plant is not in production or is unattended – 112.7(g)(1):** The Baton Rouge facility is a 24-hour per day operating smelter with a security service to prevent unauthorized entry. All visitors must log in at the main gate or administrative reception desk.

**Master flow and drain valves and any other valves that permit direct outward flow of spilled substances to the waters of the state shall be securely locked, tagged, or sealed in the “closed” position when unattended. Sample cocks, gauge valves, and other small valves are not subject to this requirement – 112.7(g)(2):** In the event of a spill, waters of the state will not be impacted due to the treatment of contaminated stormwater and process water prior to being discharged from the facility. Valves on containment structures outside of the

stormwater collection system will be closed and secured by threaded cap, car seal or other means.

The starter control on all pumps with discharge piping open to the waters of the state must be locked in the "off" position, or accessible only to authorized personnel when in non-operating or non-standby status – 112.7(g)(3): Not Applicable.

The loading/unloading connections of pipelines must be securely capped or blank-flanged when not in service or standby service. This security practice shall also apply to pipelines that are emptied either by draining or by inert gas pressure – 112.7(g)(4): The unloading connection of pipelines are securely capped or blind-flanged when not in service or in standby service. This practice also applied to pipelines that are emptied by draining.

Facility lighting shall be commensurate with the type and location of the facility and must provide for the following: (These provisions may not apply to oil and gas production sites.) – 112.7(g)(5):

- (A) Discovery of spills occurring during hours of darkness, both by operating personnel and by non-operating personnel (the general public, local police, etc.)
- (B) Prevention of spills that may result through acts of vandalism

The Baton Rouge facility has an extensive lighting system, which is sufficient for operations personnel or non-operating personnel to discover spills occurring during hours of darkness as well as to prevent spills that may result through acts of vandalism.

## **2.8 Tank Car And Tank Truck Loading/Unloading Rack – 40 CFR 112.7(h)**

Tank car and tank truck loading/unloading procedures shall meet the minimum requirements and regulations established by the Department of Transportation: DOT regulated tank trucks when connected are physically restrained with blocks and tank truck unloading areas have warning signs posted, according to DOT guidelines, to prevent vehicular departure prior to disconnect.

All tank car and tank truck loading/unloading area drainage shall flow into a catchment basin, treatment system, or other containment system designed to hold at least the maximum capacity of any single compartment of a tank car or truck loaded or unloaded at the facility – 112.7(h)(1): Unloading for trucks and cars in the process area are conducted over paved areas within the confines of the process area system. The effluents from these areas are directed to the waste water treatment system. Unloading connections for chemical trucks outside the process area are within the containment structure. Fuel (diesel and gasoline) may be unloaded into aboveground tanks outside the process area. These tanks have containment structures such as secondary containment dikes.

Where rack area drainage does not flow into a catchment basin or treatment facility designed to handle spills, a quick drainage system must be used for the tank truck loading and unloading areas. Any containment system must be designed to hold at least the

**maximum capacity of any single compartment of a tank car or tank truck loaded or unloaded at the facility: Not applicable.**

**An interlocked warning light, physical barrier system, or warning signs shall be provided in loading/unloading areas to prevent vehicular departure before complete disconnect of flexible or fixed transfer lines – 112.7(h)(2):** Tank trucks are physically restrained with blocks during unloading operations and have warning signs posted, according to DOT guidelines, to prevent vehicular departure prior to disconnect.

**Prior to filling and departure of any tank car or tank truck, the lowermost drain and all outlets of such vehicles shall be closely examined for leakage and, if necessary, tightened, adjusted, or replaced to prevent liquid leakage while in transit – 112.7(h)(3):** Tank cars are not loaded onsite. Prior to departure of any tank truck, the lower most drains and all other outlets for such vehicles are closely examined for leakage.

## **2.9 Field-Constructed Aboveground Tanks – 40 CFR 112.7(i)**

**If a field erected aboveground container goes under repair, alteration, reconstruction, or change in service that might affect the risk of a discharge or failure due to brittle fracture or other catastrophe, or has discharged oil or failed due to brittle fracture failure or other catastrophe, the container must be evaluated for risk of discharge or failure and the appropriate action must be taken.** When any storage tank or container undergoes any type of repair, alteration, or reconstruction, brittle fracture testing by API standard 653 will be conducted to ensure the integrity of the tank. This testing is intended to minimize the risk of a tank failure due to alterations.

## **2.10 More Stringent Regulations – 40 CFR 112.7(j)**

**In addition to the minimal prevention standards listed under this Plan, include in your Plan a complete discussion of conformance with the applicable requirements and other effective discharge prevention and containment procedures listed in this part or any applicable more stringent State rules, regulations, and guidelines:** Under LAC 33:IX:907, this plan will be reviewed every three years and will pertain to oil and hazardous materials contained at the Baton Rouge facility.

### **3.0 SPECIFIC REQUIREMENTS – 40 CFR 112.8**

#### **3.1 Facility Drainage – 40 CFR 112.8(b)**

Restrain drainage from diked storage areas by valves to prevent a discharge into the drainage system or facility effluent treatment system, except where facility systems are designed to control such discharge. You may empty diked areas by pumps or ejectors; however, you must manually activate these pumps or ejectors and must inspect the condition of the accumulation before starting, to ensure no oil will be discharged – 112.8(b)(1): Manually operated gate valves or ball valves are kept in the closed position to prevent uncontrolled drainage from the diked areas. Before the gate valve is opened to drain the diked area, the discharge is inspected for the presence of product accumulation and contaminated rainwater. Dike containments inside the facility are drained to the wastewater treatment system for treatment. A pump truck is employed to pump out the contaminated water from dike containment structures located outside the facility infrastructure, which is then transferred to the on-site permitted WW treatment system.

Use valves of manual, open-and-closed design, for the drainage of diked areas. Do not use flapper-type valves to drain diked areas. If facility drainage drains directly into a water course and not into an on-site wastewater treatment plant, the uncontaminated retained stormwater may be drained if it is inspected as provided in 40 CFR 112.8(c)(3)(ii), (iii) and (iv) prior to discharge – 112.8(b)(2): All operating area drainage is processed through an on-site wastewater treatment system.

If facility drainage is not engineered as above, equip the final discharge of all in-plant ditches with a diversion system that would, in the event of an uncontrolled spill, retain the spill in the facility – 112.8(b)(4): Drainage from undiked areas flows into the wastewater treatment system, treated at the wastewater treatment system prior to discharge through the permitted outfall 001. Oil absorbing booms will be placed inside the stormwater and/or process water storage tank when oil is present.

Where drainage waters are treated in more than one treatment unit and such treatment is continuous, and pump transfer is needed, provide two "lift" pumps and permanently install at least one of the pumps – 112.8(b)(5). Not applicable.

#### **3.2 Bulk Storage Containers – 40 CFR 112.8(c)**

No container will be used for storage unless its material and construction are compatible with the material stored and conditions of storage such as pressure and temperature – 112.8(c)(1): Construction of storage and transfer facilities is in accordance with applicable industry standards. All materials used in construction are compatible with the liquids stored.

All storage tank installations must be constructed so that a secondary means of containment is provided for the entire contents of the largest single tank and sufficient freeboard to contain precipitation. Diked areas must be sufficiently impervious to contain spill. An alternative system consisting of a drainage trench enclosure arranged so that any discharge will terminate and be confined in a catchment basin or holding pond may also

be used – 112.8(c)(2). Secondary containment for the storage tanks located at the Baton Rouge facility has been constructed with provisions for the entire contents of the largest single tank plus sufficient allowance for precipitation. Design of the secondary containment includes containing discharges from tanks. Contaminated process area stormwater is routed to a wastewater treatment system prior to discharge from the facility. The stormwater and process area runoff control systems are located within the confines of the facility. Storage tanks, containers, and drums located outside of the process area are also provided with adequate secondary containment.

**Drainage of uncontaminated rainwater from diked oil storage areas into a storm drain or an effluent discharge that empties into an open water course, lake, or pond, and bypasses the in-plant treatment system may be acceptable if – 112.8(c)(3):**

- (A) The bypass valve is normally sealed closed;
- (B) Inspection of the retained rainwater ensures that its presence will not cause a harmful discharge as defined in 40 CFR 110;
- (C) The bypass valve is opened and resealed following drainage under responsible supervision; and
- (D) Adequate records are kept of such events.

Typically the contained water is removed by pumps in areas where drainage from the containment is not routed to the wastewater treatment system. However, in the instances when drainage from containment is outside of the process area, drainage is controlled by manually operated valves, which will remain closed except during periods of controlled drainage of rainwater. When the gate valve is opened to drain the diked area, the discharge is inspected for the presence of a visible sheen (excess product). If no visible sheen is present, the retained rainwater will be discharged. When a sheen is detected, the contaminant will be vacuumed out. A discharge inspection log found in **Appendix B** is used to record dike discharge events:

**Test each aboveground container for integrity on a regular schedule, and whenever material repairs are made. The frequency of and type of testing must take into account container size and design (such as floating roof, skid-mounted, elevated, or partially buried.) Visual inspections must be combined with another testing technique such as hydrostatic testing, radiographic testing, ultrasonic testing, acoustic emissions testing, or another system of non-destructive shell testing. Comparison records must be kept and the container's supports and foundations must be inspected. In addition, the outside of the container must frequently be inspected for signs of deterioration, discharges, or accumulation of oil inside diked areas – 112.8(c)(6):** Visual inspections are conducted continuously and work orders are written for repairs on an as needed basis if deficiencies are found. Formal visual inspections are conducted monthly and recorded. The chemical product supplier provides totes and drums in accordance with DOT regulations. Internal visual tank inspections are documented on an as needed basis. Visual inspection records are filed with the maintenance supervisor and integrity-testing inspections are filed in the engineering maintenance records for a period of three years.

**Control leakage through defective internal heating coils by monitoring the steam return and exhaust lines for contamination from internal heating coils that discharge into an open watercourse, or pass the steam return or exhaust lines through a settling tank, skimmer, or other separation or retention system – 112.8(c)(7):** Not applicable.

Engineer or update each container installation in accordance with good engineering practice to avoid discharges. You must provide at least one of the following devices – 112.8(c)(8):

Used by Facility:

Yes    No

- |                                     |                                     |  |
|-------------------------------------|-------------------------------------|--|
| <input checked="" type="checkbox"/> | <input type="checkbox"/>            | high liquid level alarms with an audible or visual signal at a constantly manned operation or surveillance station; in smaller plants an audible air vent may suffice;   |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | high liquid level pump cutoff devices set to stop flow at predetermined tank content level;  |
| <input checked="" type="checkbox"/> | <input type="checkbox"/>            | direct audible or code signal communication between the tank gauger and the pumping station;   |
| <input checked="" type="checkbox"/> | <input type="checkbox"/>            | a fast response system for determining the liquid level of each bulk storage tank such as digital computers, telepulse, or direct vision gauges or their equivalent, with an attendant present to monitor gauges and overall filling of bulk storage containers; and |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | regular testing of liquid level sensing devices to ensure proper operation   |

Effluent treatment facilities must be frequently observed to detect possible system upsets that could cause a discharge as described in 40 CFR Part 112.1(b) – 112.8(c)(9): The effluents from the wastewater treatment plant are visually observed under the coverage of the LPDES/NPDES permit. Operations are manned 24-hours per day.

Promptly correct visible discharges which result in a loss of oil from the container, including but not limited to seams, gaskets, piping, pumps, valves, rivets, and bolts. Any accumulation of oil in diked areas must be promptly removed – 112.8(c)(10): Stormwater from the containment area and other process related equipment is inspected for a visible sheen prior to opening the manually controlled gate valves for drainage. Should oil be detected in the containment areas, it will be removed. Otherwise, the water would be released to the wastewater treatment system.

Mobile or portable storage tanks must be positioned or located as to prevent spills from reaching navigable waters. A secondary means of containment, such as dikes or catchment basins, must be furnished for the largest single compartment or tank with sufficient freeboard to contain precipitation - 112.8(c)(11): Mobile/portable storage tanks are contained by the stormwater sewer drainage area, which is routed to a wastewater treatment system. Mobile/portable storage tanks located outside of the facility operating area will be provided with adequate containment; i.e. dike, berm or other appropriate control structure.

### 3.3 Transfer Operations, Pumping, And In-Plant Process – 40 CFR 112.8(d)



Buried piping that is installed or replaced on or after August 16, 2002, must be provided with a protective wrapping and coating. Such buried piping installations must be cathodically protected or otherwise satisfy the corrosion protection standards for piping in 40 CFR 280 or a State program approve under 40 CFR 281. If a section of buried line is exposed for any reason, it must be inspected for deterioration. If corrosion damage is found, additional examination and corrective action must be undertaken as indicated by the magnitude of damage – 112.8(d)(1): Process chemical lines are not typically buried. Buried piping is limited to fresh water, firewater, and stormwater drains. Buried metallic piping installations have been properly protected to minimize corrosion. When a buried line is exposed it is carefully examined for deterioration and any damaged piping will be wrapped and coated. Exposed damaged piping will be repaired with a protective wrapping and coating and any exposed piping will also be wrapped and coated.

When a pipeline is not in service or in standby service for an extended time, the terminal connection at the transfer point must be capped or blank-flanged as well as marked as to origin – 112.8(d)(2): When a pipeline is not in service or in standby service for an extended period of time, the unloading connection at the transfer point is securely capped or blank-flanged. Anytime transfer equipment is associated with the pipeline, the terminal connection is tagged in the “off” position.


Pipe supports must be properly designed to minimize abrasion and corrosion, to allow for expansion and contraction, and to adequately support thrust loadings at bends – 112.8(d)(3): There are no oil-handling pipelines. Process pipeline supports at the Baton Rouge facility are properly designed to minimize abrasion and corrosion. The piping has expansion/contraction bends to allow for thermal changes in the piping.

All aboveground valves, piping, and appurtenances must be regularly inspected. During the inspection, the general condition of items, such as flange joints, expansion joints, valve glands and bodies, catch pans, pipeline supports, locking of valves, and metal surfaces must be assessed. Integrity and leak testing must also be conducted on buried piping at the time of installation, modification, construction, relocation, or replacement – 112.8(d)(4): Operations personnel will examine applicable oil handling equipment on a monthly basis. The visual inspection forms are found in **Appendix B**. All process piping is contained within the process sewer infrastructure. Equipment is inspected and repaired as needed.

All vehicles entering the facility must be warned that no vehicle will endanger aboveground piping or other oil transfer operations – 112.8(d)(5): Overhead pipe racks are not impacted by vehicle traffic due to elevation.

#### 4.0 MANAGEMENT APPROVAL

The policies, procedures, equipment, and inspections described in this SPCC Plan are implemented at Exide Technologies – Baton Rouge Recycling Facility.

Signature: 

Name: Edward Hardy

Title: Environmental Manager

Date: 9-25-2006

Signature: 

Name: Tim Harris

Title: Plant Manager

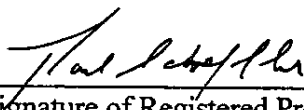
Date: 9-25-2006

## 5.0 REGISTERED PROFESSIONAL ENGINEER'S CERTIFICATION

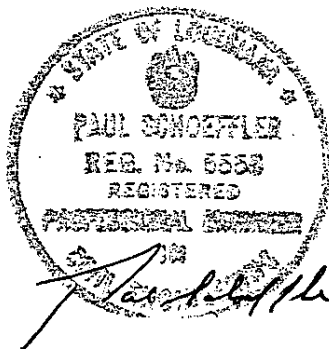
"I hereby certify that I or my agent have examined the facility, and being familiar with the provisions of LAC 33:IX Chapter 9 of the State of Louisiana, Department of Environmental Quality, Water Pollution Control Regulations, and the Environmental Protection Agency Regulations, 40 CFR Part 112, Oil Pollution Prevention, attest that this SPCC Plan has been prepared in accordance with the requirements and guidelines presented herein and good engineering practices."

Paul Schoeffler

Printed Name of Registered Professional Engineer



Signature of Registered Professional Engineer



Date 9-19-06 Registration No. 5555 State LA

By my signature below, I have reviewed the SPCC Plan for this facility, and agree to the terms of this SPCC Plan and also agree to abide by the procedures contained within this document.

**Signature**

[illegible]

## TABLES

Table 1. Listing of Above Ground Storage Tanks

	Service	Capacity (Gals.)	Construction Materials	Year Installed	Containment	Reportable Quantity
1.	Filter Aid	2,000	Stainless Steel	1987	Process Area	*
2.	Lime	2,000	Stainless Steel	1987	Process Area	*
3.	Separan	2,000	Stainless Steel	1987	Process Area	*
4.	Storm Water	685,550	Galvanized Steel	1987	Yes	N/A
5.	Process Water	101,330	Galvanized Steel	2005	Yes	N/A
6.	Diesel Fuel	4,000	Steel	1988	Yes	42 gals
7.	Gasoline Fuel	2,000	Steel	1988	Yes	42 gals
8.	Waste Oil	450	Steel	1988	Yes	42 gals
9.	Diesel Fuel	500	Steel	1990	Yes	42 gals
10.	Clean Acid	15,000	Fiberglass	1989	Yes	1,000 lbs
11.	Clean Acid	15,000	Fiberglass	1989	Yes	1,000 lbs
12.	Caustic- 50%	15,000	Fiberglass	1995	Yes	1,000 lbs
13.	Caustic - 50%	15,000	Fiberglass	1995	Yes	1,000 lbs
14.	Clarifier Feed Tank	2000	Plastic	2005	No	N/A
15.	Solids Holding Tank	2000	Plastic	2005	No	N/A
16.	Reactor Tank	6000	Fiberglass	2005	No	N/A
17.	Clarifier Tank - Filter Feed	2,400	Plastic	2005	No	N/A
18.	Recycle Tank	5,000	Stainless Steel	2005	No	N/A
19.	Recycle Tank	5000	Stainless Steel	2005	No	N/A
20.	Lubricating Oil - 2 tanks	250	Steel	1990	Yes	42 gals
21.	Lubricating Oil	500	Steel	1990	No	42 gals
22.	Lubricating Oil - 3 tanks	330	Steel	1990	Yes	42 gals

\* No information regarding reportable quantity.

Sep-06

1 of 1

## APPENDICES



## **APPENDIX A - FIGURES**

**FIGURE 1**  
**(Site Location Map)**

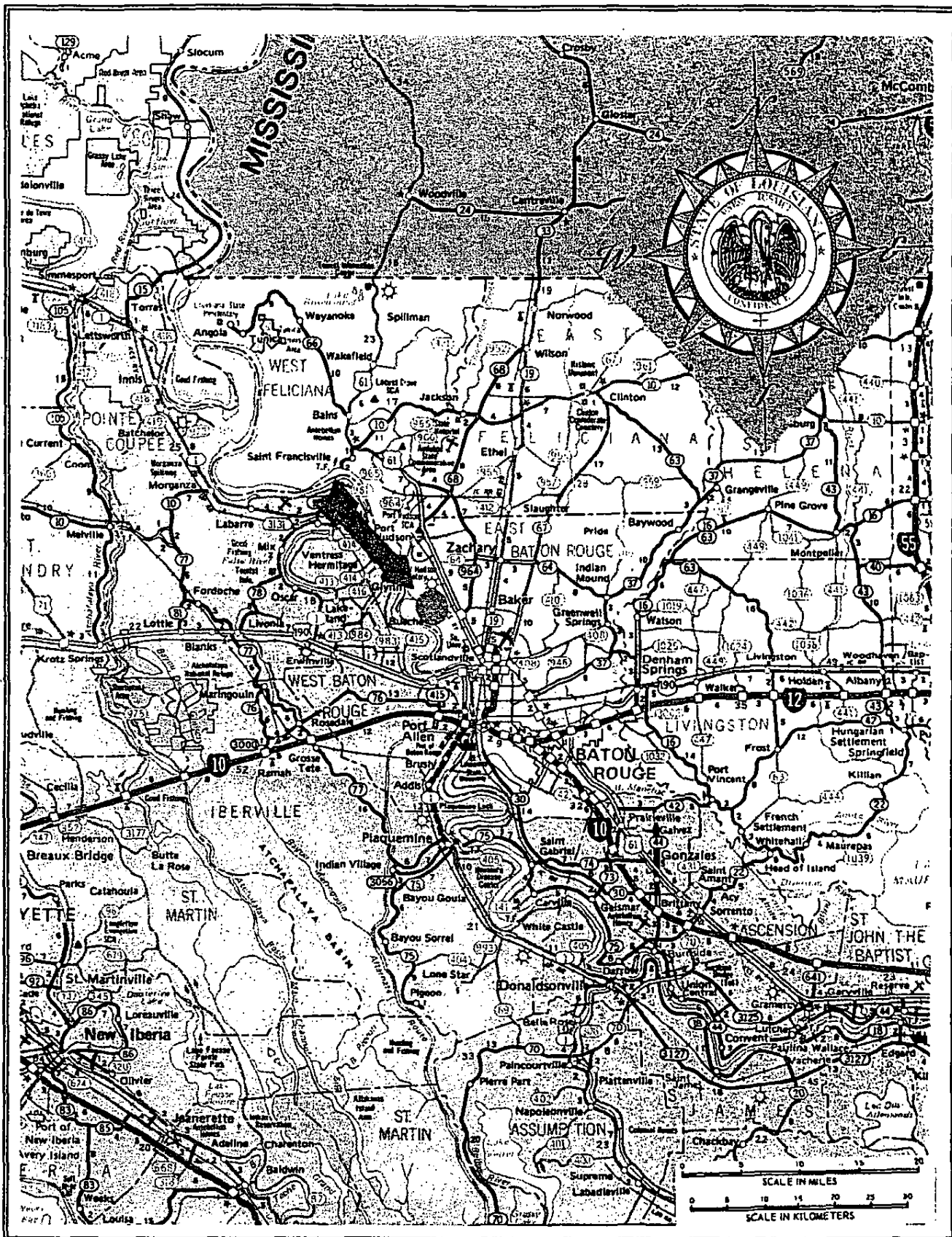


Figure 1: Site Vicinity Map  
Exide Technologies  
Baton Rouge, LA

Source: LADOTD, 1994



**FIGURE 2**  
**(Area Topographic Map)**

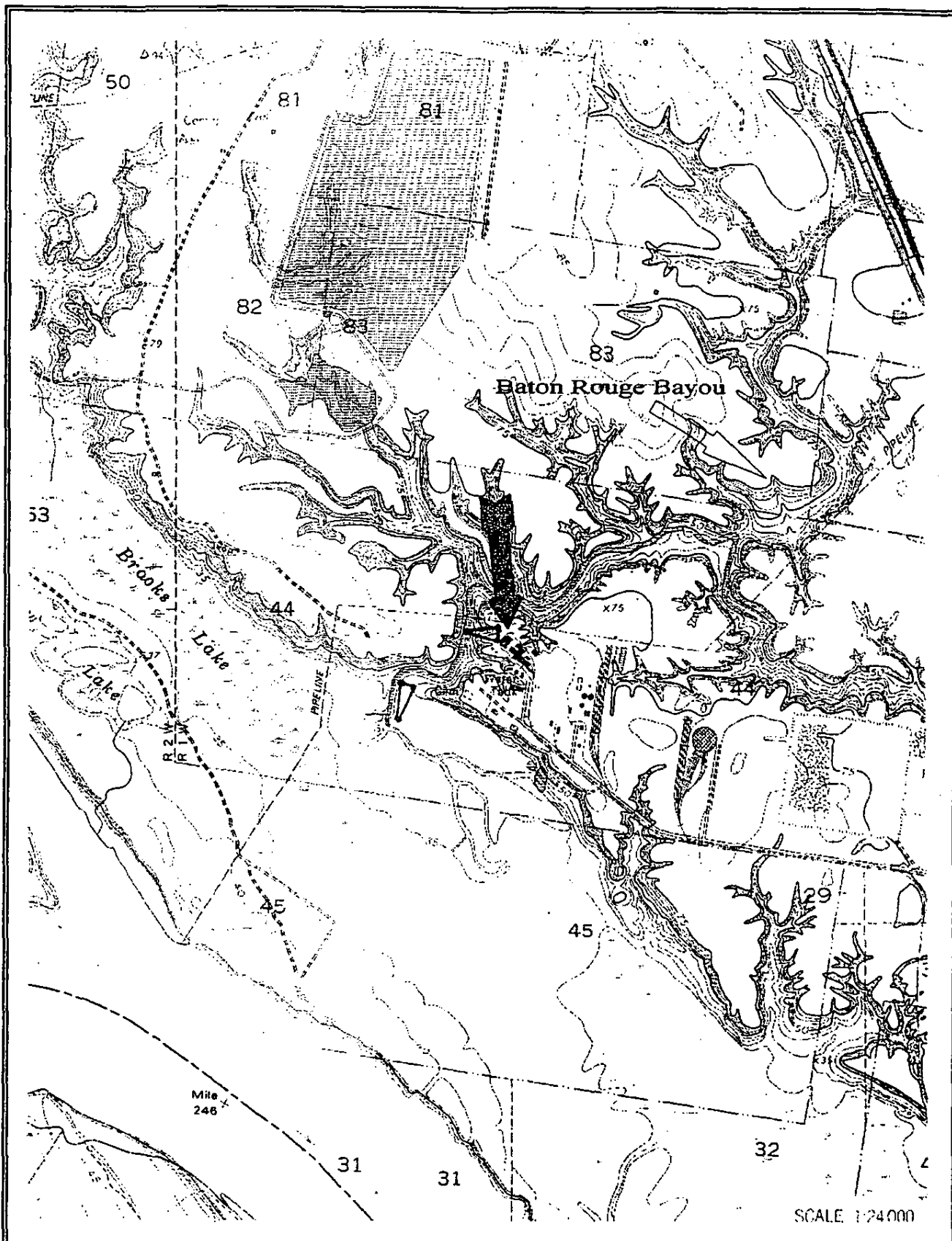


Figure 2: Site Topographic Map  
Exide Technologies  
Baton Rouge, LA

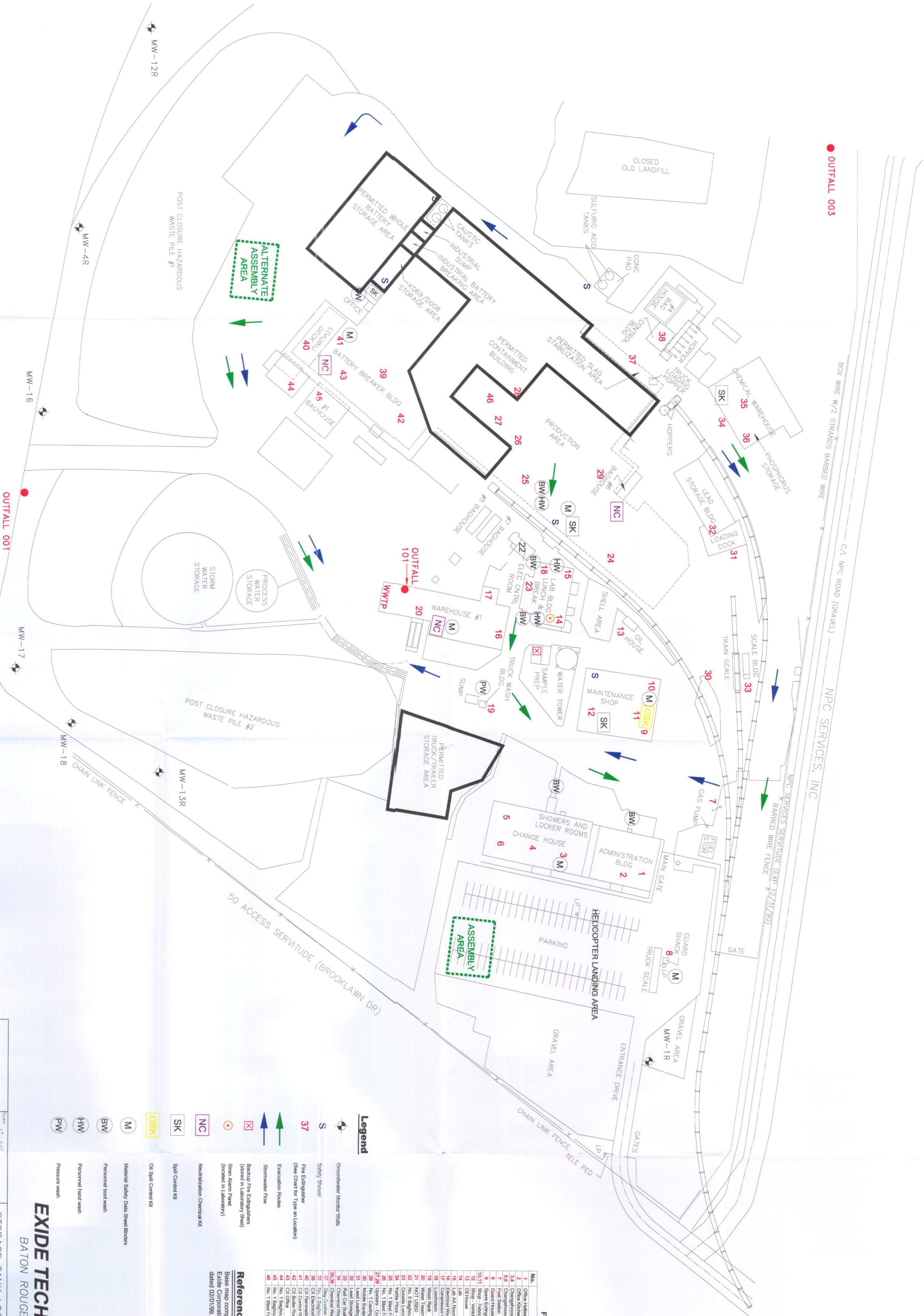
Source: USGS, 1980



**FIGURE 3**  
**(Storage Tank Locations, Site Drainage, and Storm Water  
Discharge Locations Area Drainage Map)**



OUTFALL 003



No.	Location	Type
1	Office Building	Class A
2	Office Building	Class A
3	Changehouse Hall	ABC
4	Changehouse Hall	ABC
5	Changehouse Hall	ABC
6	Changehouse Hall	ABC
7	Changehouse Hall	ABC
8	Changehouse Hall	ABC
9	Changehouse Hall	ABC
10	Changehouse Hall	ABC
11	Changehouse Hall	ABC
12	Changehouse Hall	ABC
13	Changehouse Hall	ABC
14	Changehouse Hall	ABC
15	Changehouse Hall	ABC
16	Changehouse Hall	ABC
17	Changehouse Hall	ABC
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22	Changehouse Hall	ABC
23	Changehouse Hall	ABC
24	Changehouse Hall	ABC
25	Changehouse Hall	ABC
26	Changehouse Hall	ABC
27	Changehouse Hall	ABC
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31	Changehouse Hall	ABC
32	Changehouse Hall	ABC
33	Changehouse Hall	ABC
34	Changehouse Hall	ABC
35	Changehouse Hall	ABC
36	Changehouse Hall	ABC
37	Changehouse Hall	ABC
38	Changehouse Hall	ABC
39	Changehouse Hall	ABC
40	Changehouse Hall	ABC
41	Changehouse Hall	ABC
42	Changehouse Hall	ABC
43	Changehouse Hall	ABC
44	Changehouse Hall	ABC
45	Changehouse Hall	ABC
46	Changehouse Hall	ABC

**Reference:**  
Base map comprised from drawing provided by  
Exide Corporation titled "Groundwater Report"  
dated 02/07/98.

- OSK
- SK
- NC
- M
- BW
- HW
- PW

# EXIDE TECHNOLOGIES

BATON ROUGE, LOUISIANA

STORAGE TANK LOCATIONS, SITE DRAINAGE,  
AND STORMWATER DISCHARGE LOCATION

Advanced GeoServices Corp.

1055 Andrew Drive, Suite A,  
West Chesapeake, MD 21791



## **APPENDIX B - INSPECTION RECORD FORMS**



# APPENDIX B: INSPECTION RECORD FORMS

## ABOVE GROUND STORAGE TANK

### Monthly Inspection Log

This inspection log shall be maintained for a period of three years

DATE: \_\_\_\_\_

INSPECTOR: \_\_\_\_\_

<u>Item</u>	<u>Status</u>	<u>Comments</u>
<b><u>Tank Shell</u></b>		
Drip marks	Y N	_____
Discoloration	Y N	_____
Puddles (leaked or spilled material)	Y N	_____
Corrosion or deterioration	Y N	_____
Cracks in seams or surface	Y N	_____
Bulging	Y N	_____
Openings liquid tight	Y N	_____
Stressed vegetation	Y N	_____
<b><u>Tank Foundation</u></b>		
Cracks	Y N	_____
Discoloration	Y N	_____
Puddles (leaked or spilled material)	Y N	_____
Settled or eroded	Y N	_____
Gaps or damage	Y N	_____
Damage from vegetation roots	Y N	_____
<b><u>Piping</u></b>		
Droplets (stored material)	Y N	_____
Discoloration	Y N	_____
Corrosion, cracks, or deterioration	Y N	_____
Buckling between supports	Y N	_____
Expansion joints damaged or deteriorated	Y N	_____
Valves, seals, or gaskets leaking, damaged, or deteriorated	Y N	_____
Supports damaged or deteriorated	Y N	_____
Buried piping exposed	Y N	_____
Localized dead vegetation	Y N	_____
<b><u>General</u></b>		
Tank gauge working properly	Y N	_____
Loading/Unloading Valves locked and capped	Y N	_____
Tank vents obstructed	Y N	_____
Warning signs missing or deteriorated	Y N	_____
Fencing, gates, or lighting functional	Y N	_____
Fire Extinguishers in good working order	Y N	_____
Emergency Phone Numbers Posted	Y N	_____

Inspector's Signature: \_\_\_\_\_

Date: \_\_\_\_\_

## LOADING/UNLOADING AREA

### Monthly Inspection Log

This inspection log shall be maintained for a period of three years

DATE: \_\_\_\_\_

INSPECTOR: \_\_\_\_\_

<u>Item</u>	<u>Status</u>	<u>Comments</u>
<u>Loading/Unloading Area</u>		
Catch pans damaged or deteriorated	Y N	_____
Drip marks	Y N	_____
Discoloration	Y N	_____
Puddles (leaked or spilled material)	Y N	_____
Stressed vegetation	Y N	_____
Warning signs missing or deteriorated	Y N	_____
Fencing, gates, or lighting functional	Y N	_____
Fire Extinguishers in good working order	Y N	_____
Emergency Phone Numbers Posted	Y N	_____
Driver remain present during loading and unloading operations	Y N	_____
<u>Foundation</u>		
Cracks, deterioration, settling	Y N	_____
Discoloration	Y N	_____
Damage from vegetation roots	Y N	_____
<u>Sumps</u>		
Functioning properly	Y N	_____
Oil buildup on surface	Y N	_____
Effluent has a sheen	Y N	_____
Valves, seals, or gaskets leaking, damaged, or deteriorated	Y N	_____
Pumps working efficiently	Y N	_____
Buried piping exposed	Y N	_____
Stressed vegetation	Y N	_____

Inspector's Signature: \_\_\_\_\_

Date: \_\_\_\_\_

## SECONDARY CONTAINMENT, WASTEWATER TREATMENT SYSTEMS

### Monthly Inspection Log

This inspection log shall be maintained for a period of three years

DATE: \_\_\_\_\_

INSPECTOR: \_\_\_\_\_

<u>Item</u>	<u>Status</u>	<u>Comments</u>
<b><u>Dike or Berm System</u></b>		
Valves, seals, or gaskets leaking, damaged, or deteriorated	Y N	_____
Valves locked and capped	Y N	_____
Standing Liquid	Y N	_____
Sheen on water	Y N	_____
Debris	Y N	_____
Erosion	Y N	_____
Stressed vegetation	Y N	_____
<b><u>Secondary Containment</u></b>		
Cracks, settling, deterioration	Y N	_____
Discoloration	Y N	_____
Standing Liquid	Y N	_____
Sheen on water	Y N	_____
Valves, seals, or gaskets leaking, damaged, or deteriorated	Y N	_____
Valves locked and capped	Y N	_____
<b><u>Stormwater Retention System</u></b>		
Erosion/Corrosion	Y N	_____
Sheen on water	Y N	_____
Debris	Y N	_____
Stressed Vegetation	Y N	_____
<b><u>Oil/Water Separator</u></b>		
Functioning properly	Y N	_____
Oil buildup on surface	Y N	_____
Effluent has a sheen	Y N	_____

Inspector's Signature: \_\_\_\_\_

Date: \_\_\_\_\_

# Containment Structure & Tank Inspection Outside Process Area

Date \_\_\_\_\_

Complete after each rain event or once per month

ID	Area	Tank Capacity	Structure	Leakage	Empty/ Pooled Liquid	Tank Integrity	Fill Pipe/ Connections	Drain Valve Closed/Open	Comments
To Be Completed by Environmental Department									
	Maintenance area								
	Fuel Area								
	Fire Pumps								
	Sulfuric acid tank area								
	Caustic tank area								

✓ = Ok, Good Condition  
X = Needs Attention

When Drained to Ground or Open Ditch, The Discharge Inspection Log must be completed

Inspector \_\_\_\_\_

Submit to Environmental Department when complete

# DISCHARGE INSPECTION LOG

**Outfall ID:** 001, 101, and 003

**This log shall be maintained for a period of three years. To be filled out when containment is drained by valve to ground. This can only be done when there is no oil/ fuel or other contaminated rainwater.**

[illegible]

**Return to the Environmental Department**

# STORMWATER LOCATION SITE INSPECTION (Page 1 of 1)

Monthly

To be completed by the WWT Operator

## Process Outfall 001

Outfall Status: ☐ Active ☐ Inactive

Inspection Check Item	Y	N	NA
Is there adequate vegetative cover to prevent erosion?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is there evidence of oil, fuel, or other spills on the ground or water?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If yes, describe _____			
Are modifications required to reduce storm water pollution?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If yes, describe _____			

## Stormwater Outfall 003

Outfall Status: ☐ Active ☐ Inactive

Inspection Check Item	Y	N	NA
Is there adequate vegetative cover to prevent erosion?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is there evidence of oil, fuel, or other spills on the ground or water?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If yes, describe _____			
Are modifications required to reduce storm water pollution?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If yes, describe _____			

## Overall site

Inspection Check Item	Y	N	NA
Is the rain gauge in good condition and checked daily for accumulation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is there off-site tracking of debris or sediment where vehicles enter or exit the site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is ground maintenance required (debris pickup, grass cutting)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Address any identified non-compliance issues and/or ineffective BMPs here and the planned corrective measures. \_\_\_\_\_

\_\_\_\_\_  
 \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

## **APPENDIX C - REGULATORY APPLICABILITY**

### SPCC Plan Regulatory Applicability

LOUISIANA ADMINISTRATIVE CODE	CODE OF FEDERAL REGULATIONS	SPCC PLAN SECTION
LAC 33:IX 903 Applicability	40 CFR 112.1 Applicability	1.0
Not Applicable	112.3(d)	5.0
Not Applicable	112.7	4.0
907 (B)	112.7 (a)	2.1
907 (C)	112.7 (b)	2.2
907 (D)	112.7 (c)	2.3
907 (E)	112.7 (d)	2.4
907 (J)	112.7 (e)	2.5
907 (B)	112.7	2.0
907 (I)	112.7 (f)	2.6
907 (H)	112.7 (g)	2.7
907 (F), 9, 10, 11	112.7 (h)	2.8
Not applicable	112.7 (i)	2.9
907 (F)	112.7 (j)	2.10
907	112.8 (b)	3.1
907 (F)	12.8 (c)	3.2
907 (F)	112.8 (d)	3.3



C. The reportable quantity determined under this Subchapter, except where otherwise noted, will apply regardless of the environmental medium (land, air, water, groundwater) into which the pollutant is discharged.

**Pollutant CAS No.1 RCRA2 Waste Number Pounds**

Allyl chloride 107051 1000/10 @  
Aniline 62533 U012 5000/1000 @  
Antimony\* 7440360 5000/100 @  
Antimony Compounds 20008 100 @  
Barium\* 7440393 100 @  
Barium compounds 20020 100 @  
Biphenyl 92524 100/100 @  
1-Butanol 71363 U031 5000/1000 @  
2-Butanone 78933 U159 5000/1000 @  
n-Butyl alcohol 71363 U031 5000/1000 @  
Carbonic dichloride 75445 P095 10/1 @  
Carbonyl sulfide 463581 100/100 @  
Chlorinated Dibenzo  
Furans, all isomers 1  
Chlorine Dioxide 10049044 1  
Chromium3 \* 7440473 5000/100 @  
Chromium compounds 20064 100 @  
Copper3 7440508 5000/100  
Copper Compounds 20086 100 @  
Cumene 98828 U055 5000/1000  
1,3-Dichloropropylene 542756 100 @  
Ethyl acrylate 140885 U113 1000/10 @  
Ethylene 74851 5000  
Ethylene glycol 107211 5000/5000 @  
Glycol ethers \*\* 100 @  
Hexane 110543 5000/1000  
Hydrochloric acid 7647010 5000/1000 @  
Hydrofluoric acid 7664393 U134 100/10 @  
Hydrogen chloride 7647010 5000/1000 @  
Hydrogen fluoride 7664393 U134 100/10 @  
1,3-Isobenzofurandione 85449 U190 5000/1000  
Manganese\* 7439965 100  
Manganese compounds 100 @  
Methanethiol 74931 U153 100/25  
Methyl acrylate 96333 10 @  
Methyl ethyl ketone  
(MEK) 78933 U159 5000/1000  
Methyl isobutyl ketone 108101 U161 5000/1000 @  
Methylmercaptan 74931 U153 100/25

Methyl methacrylate 80626 U162 1000/100 @  
4-Methyl-2-pentanone 108101 U161 5000/1000  
Methylene diphenyl  
isocyanate 101688 1000  
Nitric acid 7697372 1000/100 @  
Oil 1 barrel  
Phthalic anhydride 85449 U190 5000/1000 @  
Polynuclear Aromatic  
Hydrocarbons \*\*\* 1  
Produced Water 1 barrel  
2-Propenoic acid, ethyl  
ester 140885 U113 1000/10 @  
2-Propenoic acid, 2-  
methyl-, methyl ester 80626 U162 1000/100 @  
Propionaldehyde 123386 1000/100 @  
Strontium sulfide 1314961 P107 100  
Sweet Pipeline Gas  
(Methane/Ethane) 42000 (1,000,000scf)  
Thiomethanol 74931 U153 100/25 @  
Vinyl acetate 108054 5000/100 @  
Vinyl acetate monomer 108054 5000/100 @  
Volatile Organic Compounds not otherwise listed 4 5000  
F003

The following spent non-halogenated solvents and the still bottoms from the recovery of these solvents:

F003 100  
Methyl isobutyl ketone 108101 5000/1000 @  
n-Butyl alcohol 71363 5000/1000 @  
F005

The following spent  
non-halogenated  
solvents and the still  
bottoms from the  
recovery of these  
solvents: F005 100

Methyl ethyl ketone 78933 U159 5000/1000 @

\* No reporting of releases into the ambient air of this metal is required if the diameter of the pieces of solid metal released is equal to or exceeds 100 micrometers (0.004 inches).

\*\* The combined emissions of all glycol ethers shall be totaled to determine if a Reportable Quantity has been exceeded.

\*\*\* The combined emissions of all Polynuclear Aromatic Hydrocarbons (PAHs), excluding any PAHs otherwise listed, shall be totaled to determine if a Reportable Quantity has been exceeded.

1 Chemical Abstracts Service Registry Number.

2 Resource Conservation and Recovery Act of 1976, as amended.

3 Prompt notification of releases of massive forms of these substances is not required if the diameter of the pieces of the substance released is equal to or exceeds 100 micrometers (0.004 inches).

4 The combined emissions of all volatile organic compounds (VOCs), excluding any VOCs otherwise listed, shall be totaled to determine if a reportable quantity has been exceeded. VOC is defined in LAC 33:III.111 and exempt compounds are listed in LAC 33:III.2117.

@ The first RQ listed denotes the reportable quantities that will apply to unauthorized emissions based on total mass emitted into or onto all media within any consecutive 24-hour period. The second RQ listed denotes the reportable quantities that will apply to unauthorized emissions based on total mass emitted into the atmosphere.

## **APPENDIX D – SUBSTANTIAL HARM CRITERIA CHECKLIST**

APPENDIX D

CERTIFICATION OF SUBSTANTIAL HARM DETERMINATION FORM

Facility Name: Exide Technologies - Baton Rouge Smelter

Facility Address 2400 Brooklawn Drive, off State Hwy. 61  
Baton Rouge, Louisiana 70807

Does the facility transfer oil over water to or from vessels and does the facility have a total oil storage capacity greater than or equal to 42,000 gallons?

YES \_\_\_\_\_ NO X

Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and does the facility lack secondary containment that is sufficiently large to contain the capacity of the largest aboveground oil storage tank plus sufficient freeboard to allow for precipitation within any aboveground storage tank area?

YES \_\_\_\_\_ NO X

Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance such that a discharge from the facility could cause injury to fish and wildlife and sensitive environments?

YES \_\_\_\_\_ NO X

Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance such that a discharge from the facility would shut down a public drinking water intake?

YES \_\_\_\_\_ NO X

Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and has the facility experienced a reportable oil spill in an amount greater than or equal to 10,000 gallons within the past five years?

YES \_\_\_\_\_ NO X

**CERTIFICATION**

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals responsible for obtaining this information, I believe that the submitted information is true, accurate, and complete.

  
\_\_\_\_\_  
Signature

Tim Harris  
Name

Plant Manager  
Title

9-25-2006  
Date

## **APPENDIX E – SPILL CONTINGENCY PLAN ASSESSMENT**

## Appendix E Spill Contingency Plan Assessment

In the event of a spill, the first person at the spill scene should determine the best course of action by following the spill procedure outlined below. Every effort should be made, in a safe manner, to prevent the spilled material from reaching a waterway or soil surface, from ponding in an area that could cause injury, or to be emitted into the atmosphere uncontrolled. The procedure is as follows:

The first person at the scene should:

1. Assess the situation.
  - a) What are the hazards involved?
    - i) Fire, explosion
      - 1) YES. Back-off, call ERT on radio for assistance, evacuate immediate vicinity
      - 2) NO. proceed to next step
    - ii) Chemical burns?
      - 1) YES. call ERT on radio for assistance
      - 2) NO. proceed to next step
    - iii) Dangerous vapors?
      - 1) YES Back-off, call ERT on radio for assistance, evacuate immediate vicinity
      - 2) NO. proceed to next step
    - iv) Is the spill harmful to the environment?
      - 1) YES. call security at extension 171 and the Environmental Department
      - 2) NO. proceed to next step
    - v) Is the spill released to a process sewer drain?
      - 1) YES. proceed to step b
      - 2) NO. proceed to next step
    - vi) Can the public be exposed?
      - 1) YES. call security at extension 171
      - 2) NO. proceed to next step
    - vii) Has the spill entered a waterway?
      - 1) YES. call security at extension 171 and proceed to next step
      - 2) NO. proceed to next step
  - b) Identify the source of the spill
  - c) Is it safe to proceed alone? If not, contact area supervisor immediately, CALL SECURITY AT 171, provide as much information as possible
2. Stop the discharge, if possible
  - a) Proceed to stop the spill if it can be done safely
  - b) Construct containment to prevent the spill from entering a waterway or migrating onto a soil surface
  - c) The Environmental Manager should be notified as soon as possible
3. The supervisor should determine:
  - a) If more help is needed and if so, contact PHP for the contract Hazmat team
  - b) The time of spill, the size of the spill, the location of the spill, the material involved, if any, that reached a waterway, soil surface, or was released to the air.

- c) If the spill is reportable, refer to the Discharge Information Report located in Appendix F and report to all applicable agencies.

4. The environmental notifications should follow the contact list shown in **Appendix F**

NOTE: The first person at the scene and or the area supervisor is responsible for carrying out this procedure until relieved by the person notified. If the spill has entered a waterway, migrated onto a soil surface, is a gaseous release, or if there is a question concerning the proper response, notify security at facility.

The responding Environmental Department personnel should:

1. Verify the accuracy of the information collected by the area supervisor and determine whether or not the spill is reportable.
  - a) The list of Reportable Quantities for common chemicals is found in **Appendix C**.
  - b) Its important to note that any chemical release that causes injury requiring hospitalization or death, or that threatens to cause off-site impact is considered reportable by state regulations.
2. If reportable, provide the following information to all the agencies listed in **Appendix F**  
REMEMBER: Report only the facts, don't speculate.
  - i) Company name and location
  - ii) Name, title, and phone number of person reporting
  - iii) Location of spill
  - iv) Material spilled
  - v) Estimated quantity
  - vi) Actions taken for containment and cleanup
  - vii) Released media involved; air, water, or soil
3. Contact qualified contractor concerning clean-up and disposal
4. In the event of a significant environmental impact beyond limits of property, or when external authorities are contacted the following additional notifications must be made:Exide Technologies' Environmental Health and Safety Director for North America.

As a follow up to any release occurrence, conduct an audit to determine what measures could be taken to prevent a repeat incident.



## **APPENDIC F - DISCHARGE INFORMATION REPORT**

## **EMERGENCY CONTACT LIST AND PHONE NUMBERS**

### **EXIDE TECHNOLOGIES – BATON ROUGE SMELTER**

(225) 775-3040 - Main Gate Security

Tim Harris, Plant Manager (Emergency Coordinator)

(225) 405-8193 Cell Number

Edward Hardy, Environmental Manager (Facility Response Coordinator)

(225) 614-4977 Cell Number

Mike Parker, EH&S Manager (Alternate Facility Response Coordinator)

(225) 921-8505 Cell Number

Craig Simpson, Plant Engineer (Alternate Facility Response Coordinator)

(225) 405-8192 Cell Number

### **Agency Contacts**

Louisiana State Police – 24-hour emergency response

(225) 925-6595 - Baton Rouge

National Response Center

1-800-424-8802

Louisiana Department of Environmental Quality

(225) 219-3640 - 8 a.m. to 5:00 p.m.

(225) 342-1234 - 24-hour emergency number

Local Fire Department Telephone Number

911 or (225) 635-3620

Local Sheriff Department Telephone Number

911

Local Ambulance Service Telephone Number

911

### **Emergency Response Contractors**

PHP (225) 978-9604

**TABLE 1**  
**EMPLOYEE EMERGENCY NOTIFICATION TELEPHONE LIST**  
 Exide Technologies- Baton Rouge Smelter

<u>NAME</u>	<u>Emergency Officer Title</u>	<u>POSITION</u>	<u>PHONE #</u>	<u>PAGER/CELL #</u>
Tim Harris	Chief Officer	Plant Manager	(225) 275-7734	(225) 405-8193=cell
Mike Parker	Safety Officer	HS&E Manager	(225) 261-7192	(225) 921-8505=cell
Edward Hardy	Liaison Officer	Environmental Manager	(225) 658-7547	(225) 614-4977 =cell
Tommy Payne	Financial Officer	Comptroller	(225) 753-0445	(225) 505-7622=cell
Craig Simpson	Utilities Officer	Plant Engineer	(225) 756-0291	(225) 405-8192=cell
Jo Wood	Communication Officer	Personnel Director	(225) 664-3117	(225) 773-6563=cell
Michael Krickel	Engitec Prod. Assist.	Quality Manager	(225) 753-0089	(225) 975-0854=cell
Tony Crump	Emergency Procurement	Purchasing Mgr.	(225) 658-5808	(225) 229-2795=cell
Larry Myers	ERT Team Leader	Production Manager	(2225) 275-7269	(225) 978-2703=cell
Robert Delmore	ERT Team Leader	CX Production Manager.	(225) 927-1842	(225) 223-9180=cell
Johnny Turner	Utilities Officer Assistant	Plant Electrician	(225) 778-1097	(225) 935-8135=cell
Noel Barnes	ERT Team Leader	Production Shift Supv.	(225) 635-9103	-
Ronnie Williams	ERT Team Leader	Production Shift Supv.	(225) 658-7777	-
Ronnie Fisher	ERT Team Leader	Prod. Training Supv.	(601) 888-7160	(601) 807-5824=cell
Eugene Robinson	ERT Team Leader	Production Shift Supv.	(225)-928-7985	-
Patrick Carter	ERT Team Leader	Production Shift Supv.	(225) 601-7594	-
Tyrone Perry	Shipping & Security	Shipping Supervisor	(225) 923-7698	(225)445-4692=cell
Sergio Reyes	Assistant Chief Officer	Maintenance Manager	(225) 272-9601	
Sergio Reyes	Emergency Maint. Assist.	Maintenance Supv.	(225) 272-9601	-
Chris Butler	Shipping & Security	Traffic Manager	(225) 665-3171	(225) 405-8191=cell
Calvin Arceneaux	Security Officer	Security Supv.	(225) 775-3040	-

**TABLE 2**  
**Exide Technologies-Baton Rouge Smelter**  
**EMERGENCY SERVICES TELEPHONE LIST**  
Revised 9/18/06

***Step #1 : CRITICAL – Call 911 first and give them the information 911 from which the dispatch will determine what type of response to send***

**Step #2: Louisiana State Police -24 hour Emergency Response 925-6595**

***Note: This number must be called immediately within one hour of a significant event such as a spill or release on a public road or highway regardless of the quantity***

**MEDICAL**

***Primary Hospital***

Lane Memorial Hospital	6300 Main St. Zachary	658-4000
------------------------	-----------------------	----------

***Burn Unit***

Baton Rouge General Hospital	3600 Florida Blvd.	387-7000
------------------------------	--------------------	----------

***Secondary Hospital***

Our Lady of the Lake Hospital	5000 Hennessy Boulevard	765-6565
-------------------------------	-------------------------	----------

***Primary Ambulance Service***

Acadian Ambulance Service (Non-Critical Injuries)	267-1111
---	----------

**FIRE DEPARTMENTS**

***Primary Responder***

Alsen Fire Department	774-3473
-----------------------	----------

***Secondary Responder***

Brownsfield Fire Department	778-0344
-----------------------------	----------

Baker Fire Department	775-3712
-----------------------	----------

Baton Rouge Fire Department (Dispatch Center)	389-4617
---	----------

**LAW ENFORCEMENT**

National response Center	800-424-8802
--------------------------	--------------

Emergency Response Contractor	PHP	225-978-9604
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**Note: All area codes are 225 unless specified.**

**TABLE 2 (Continued)**  
**Exide Technologies-Baton Rouge Smelter**  
**EMERGENCY SERVICES TELEPHONE LIST**  
Revised 9/18/06

<b>Louisiana Dept of Environmental Quality</b>		
8:00Am - 4:30PM		219-3640
24 hr Emergency Number		342-1234
<b>East Baton Rouge Sheriff's Office</b>		389-5000
<b>Scotlandville Sheriff's Office</b>		389-5105
<b>OXYGEN SERVICE - BOC</b>		
#1) Primary Contact – Charley Chutz	Cell 273-3246	774-5783
#2 Secondary Contact – Paul Fagan	Cell	921-9421
#3 Alternate Contact - Errol Tisdale		775-8075
	Pager:	1-888789-7498
<b>ELECTRICAL:</b>		
A. ENTERGY: (Incoming Power)		1-800-766-1648
Jim Glascock - Service Rep. Pager		381-5833
B. HINCKLE & McCOY (Primary Service)	Office:	601-947-4420
Ronald Hopkins – Service Rep.	Cell:	921-4896
C. Kulaga Construction co.		888-550-9906
Mike Kulaga	Cell:	337-413-9612
<b>NATURAL GAS</b>		
Cypress Gas		800-600-6240
	Local Office:	338-9418
<b>MISCELLANEOUS</b>		
Kansas City Southern Railroad		379-4214
Custom Security (Baker Warehouse)		927-5535
CHEMTREC (Over-the-Road Chemical Spills)		1-800-523-8954

Note: All area codes are 225 unless specified.

**APPENDIX F: DISCHARGE INFORMATION REPORT AND CONTACT LIST**

**EXIDE TECHNOLOGES - BATON ROUGE SMELTER, 2400 BROOKLAWN  
DRIVE, OFF LA HWY. 61  
BATON ROUGE, LA 70807**

DATE: \_\_\_\_\_  
NAME OF PERSON COMPLETING THIS  
FORM: \_\_\_\_\_  
TIME AND DURATION OF RELEASE: \_\_\_\_\_  
LOCATION AND SOURCE OF RELEASE: \_\_\_\_\_  
WHAT WAS RELEASED (Caustic, Sulfuric Acid, etc): \_\_\_\_\_

WHAT MEDIA WAS IT RELEASED INTO: (Air, Water or Soil): \_\_\_\_\_  
QUANTITY RELEASED: \_\_\_\_\_  
DESCRIPTION OF CAUSE: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

NOTIFIED: \_\_\_\_\_  
SECURITY: \_\_\_\_\_  
ENVIRONMENTAL: \_\_\_\_\_  
SAFETY: \_\_\_\_\_

**FOR UNAUTHORIZED DISCHARGE:**

PERSON WHO NOTIFIED DEQ (225-219-3640; Day)  
(225-342-1234; Night): \_\_\_\_\_

DEQ OFFICIAL NOTIFIED: \_\_\_\_\_  
TIME AND DATE OF DEQ NOTIFICATION: \_\_\_\_\_

CORRECTIVE ACTION TAKEN: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

ACTIONS TO PREVENT REOCCURRENCE: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

OFF SITE IMPACT AND ADDITIONAL COMMENTS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**RETURN TO ENVIRONMENTAL DEPARTMENT WITHIN 24 HOURS FOR  
FOLLOW-UP WRITTEN REPORT**

**APPENDIX G – STORMWATER POLLUTION PREVENTION PLAN  
WORK SHEETS**

## STORM WATER POLLUTION PREVENTION PLAN


### GENERAL INFORMATION SUMMARY

1. Facility Name and Operator: Exide Technologies – Baton Rouge Smelter
2. Facility Type: Lead Smelter Plant
3. Facility Location: 2400 Brooklawn Drive, Off State hwy. 61, Baton Rouge, LA  
70807, East Baton Rouge Parish
4. LWDPs Permit Number: LA 0004464
5. Designated person accountable for storm water pollution prevention at facility:  
Name and title: Tim Harris, Plant Manager

Secondary Contact: Edward Hardy, Environmental Manager

### CERTIFICATION

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

  
\_\_\_\_\_  
Tim Harris, Plant Manager

9-25-2006  
Date



<p align="center"><b>Construction Plan for Erosion Control</b>  <b>Less than 5 Acres, and Greater than 5 Acres</b></p>		<p>Completed by: <u>Edward Hardy</u>          Title: <u>Environmental Manager</u>          Date: <u>09/18/06</u></p>
<p align="center"><b>Description of the Best Management Practices that will be incorporated into facility operations.</b></p>		
<p align="center"><b>Construction Activity</b></p>	<p><b>Description of Controls</b></p>	
<p><b>Area less than 1 Acre</b></p>	<p>Minimize area to be disturb, prevent sheet flow from washing out graded/ excavated area, construction should begin immediately to prevent washout of area, uncontaminated spoil material to be moved to designated area, contaminated material to be stored on and covered with plastic sheeting at designated area and disposed of as approved by Environmental Department, re-vegetate ground</p>	
<p><b>Area less than 5 Acres &amp; greater than 1 Acre</b></p>	<p>Sediment and erosion control measures minimum requirements: minimize area to be disturb, prevent sheet flow from washing out graded/ excavated area, use hay bails or other approved material as erosion fence, construct drainage ditches to route runoff to treatment if needed, inspect (and document) site after precipitation to determine effectiveness of control structures, uncontaminated spoil material to be moved to designated area, contaminated material to be stored on and covered with plastic sheeting, moved to designated area and disposed of as approved by Environmental Department, construction should begin immediately to prevent washout of area, re-vegetate ground</p>	
<p><b>Greater than 5 Acres</b></p>	<p>Notify Environmental Department prior to activity, Environmental Department to file NOI with State, Specific Construction Plan for the activity shall be developed.</p>	
<p> </p>		

**POLLUTION PREVENTION TEAM**

Worksheet #1

Completed by: Suresh SharmaTitle: Technical DirectorDate: September 18, 2006**MEMBER ROSTER**Leader: Tim HarrisTitle: Plant ManagerOffice Phone: (225) 775-3040

Responsibilities: Signatory authority, ensure that this plan is implemented and followed. Responsible for supporting the stormwater pollution prevention activities by providing adequate resources to the Environmental Manager.

## Members:

(1) Edward HardyTitle: Environmental ManagerOffice Phone: (225) 775-3040

Responsibilities: Coordinate all stages of plan implementation, responsible for supporting the stormwater pollution prevention activities and conduct inspections. Maintain a record of inspections for three (3) years. Provide assistance for sampling activities.

(2) Mike ParkerTitle: EH&S ManagerOffice Phone: (225) 775-3040

Responsibilities: Perform the responsibilities of Environmental Manager during his/her absence from the office. Support stormwater pollution prevention activities. Identify changes that are required to keep this plan current.

(3) \_\_\_\_\_

Title: \_\_\_\_\_

Office Phone: \_\_\_\_\_

Responsibilities: \_\_\_\_\_

(4) \_\_\_\_\_

Title: \_\_\_\_\_

Office Phone: \_\_\_\_\_

Responsibilities: \_\_\_\_\_

**DEVELOPING A SITE MAP**

Worksheet #2

Completed by: Suresh SharmaTitle: Technical DirectorDate: September 18, 2006

**Instructions:** Draw a map of your site including a footprint of all buildings, structures, paved areas, and parking lots. The information below describes additional elements required by EPA's General Permit (see example maps in Figures 2.3 and 2.4).

EPA's General Permit requires that you indicate the following features on your site map: See Figure 3 for the applicable features

- All outfalls and storm water discharges - identified
- Drainage areas of each storm water outfall - identified
- Structural storm water pollution control measures, such as:
  - Flow diversion structures - identified
  - Retention/detention ponds – not applicable
  - Vegetative swales – not applicable
  - Sediment traps - identified
- Name of receiving waters (or if through a Municipal Separate Storm Sewer System) – Baton Rouge Bayou
- Locations of exposed significant materials (see Section 2.2.2) - identified
- Locations of past spills and leaks (see Section 2.2.3) - none
- Locations of high-risk, waste-generating areas and activities common on industrial sites such as:
  - Fueling stations - identified
  - Vehicle/equipment washing and maintenance areas - identified
  - Area for unloading/loading materials - identified
  - Above-ground tanks for liquid storage - identified
  - Industrial waste management areas (landfills, waste piles, treatment plants, disposal areas) - identified
  - Outside storage areas for raw materials, by-products, and finished products - identified
  - Outside manufacturing areas - identified
  - Other areas of concern (specify: Parking areas)

**Note:** The applicable areas of concern have been identified on Figure 3 – site plot plan and drainage map.

# MATERIAL INVENTORY

Worksheet #3

Completed by: Suresh Sharma

Title: Technical Director

Date: September 18, 2006

Instructions: List all materials used, stored, or produced onsite. Assess and evaluate these materials for their potential to contribute pollutants to storm water runoff. Also complete Worksheet 3A if the material has been exposed during the last three years.

Material	Purpose/Location	Quantity (units)			Likelihood of contact with storm water. If yes, describe reason.	Quantity Exposed in Last 3 Years	Past Significant Spill or Leak	
		Used	Produced	Stored, gal			Yes	No
Filter Aid	Process Area			2,000	Yes, if product released	None		x
Lime	Process Area			2,000	Yes, if product released	None		x
Separen	Process Area			2,000	Yes, if product released	None		x
Process water	WW Treatment Area			101,300 / 685,550	Yes, if product released inside Sec. Containment	None		x
Diesel Fuel	Fuel Storage Area			4,000	Yes, if product released inside Sec. Containment	None		x
Gasoline	Fuel Storage Area			2,000	Yes, if product released inside Sec. Containment	None		x
Waste Oil	Fuel Storage Area			450	Yes, if product released inside Sec. Containment	None		x
Diesel Fuel	Fuel Storage Area			450	Yes, if product released inside Sec. Containment	None		x
Lubricant Tanks	Maintenance Area			2 nos, 250 3 nos - 330 One 500				
Clean Acid - Sulfuric Acid	North Side of Process Area			15,000	Yes, if product released inside Sec. Containment	None		x
Clean Acid - Sulfuric Acid	North Side of Process Area			15,000	Yes, if product released inside Sec. Containment	None		x
Caustic - 50%	North Side of Process Area			15,000	Yes, if product released inside Sec. Containment	None		x
Caustic - 50%	North Side of Process Area			15,000	Yes, if product released inside Sec. Containment	None		x
Clarifier Feed Tank	Process Area			2,000	Yes, if product released	None		x
Solids Holding Tank	Process Area			2,000	Yes, if product released	None		x
Reactor Tank	Process Area			6,000	Yes, if product released	None		x
Clarifier Tank - Filter Feed	Process Area			2,400	Yes, if product released	None		x
Recycle Tank	Process Area			5,000	Yes, if product released	None		x
Recycle Tank	Process Area			5,000	Yes, if product released	None		x

# DESCRIPTION OF EXPOSED SIGNIFICANT MATERIAL

Worksheet #3A

Completed by: Suresh Sharma

Title: Technical Director

Date: September 18, 2006

**Instructions:** Based on your material inventory, describe the significant materials that were exposed to storm water during the past three years and/or are currently exposed. For the definition of "significant materials" see Appendix B of the manual.

Description of Exposed Significant Material	Period of Exposure	Quantity Exposed (gallons)	Location (as indicated on the site map)	Method of Storage or Disposal (e.g. pile, drum, tank)	Description of Material Management Practice (e.g. pile covered, drum sealed)
Filter Aid	1987	2,000	Process Area	Tank, no sec. containment	
Lime	1987	2,000	Process Area	Tank, no sec. containment	
Separan	1987	2,000	Process Area	Tank, no sec. containment	
Process Water	2005	101,000/ 685,550	WW Treatment Plant	Tank, sec. containment	
Diesel Fuel	1988	4,000	Fuel Storage Area	Tank, sec. containment	
Gasoline	1988	2,000	Fuel Storage Area	Tank, sec. containment	
Waste Oil	1988	450	Fuel Storage Area	Tank, sec. containment	
Diesel Fuel	1990	450	Fuel Storage Area	Tank, no sec. containment	
Lubricants	1990	250 to 500	Maintenance Area	Tank, Sec. Containment	
Clean Acid - Sulfuric Acid	1989	15,000	North Side of Process Area	Tank, sec. containment	
Clean Acid - Sulfuric Acid	1989	15,000	North Side of Process Area	Tank, sec. containment	
Caustic - 50%	1995	15,000	North Side of Process Area	Tank, sec. containment	
Caustic - 50%	1995	15,000	North Side of Process Area	Tank, sec. containment	
Clarifier Feed Tank	2005	2,000	Process Area	Tank, no sec. containment	
Solids Holding Tank	2005	2,000	Process Area	Tank, no sec. containment	
Reactor Tank	2005	6,000	Process Area	Tank, no sec. containment	
Clarifier Tank - Filter Feed	2005	2,400	Process Area	Tank, no sec. containment	
Recycle Tank	2005	5,000	Process Area	Tank, no sec. containment	
Recycle Tank	2005	5,000	Process Area	Tank, no sec. containment	

\*\* All fuel and lubricant tanks are located inside secondary containment structures. Also, sulfuric acid and caustic tanks are located inside secondary containment structures. Process area drains into wastewater treatment system.

# LIST OF SIGNIFICANT SPILLS AND LEAKS

Work Sheet #4

Completed by: Suresh Sharma


Title: Technical Director

Date: September 18, 2006

Record of all significant spills and significant leaks of toxic or hazardous pollutants that have occurred at the facility in the three years prior to the effective date of the permit.

Definitions: Significant spills include, but are not limited to, releases of oil or hazardous substances in excess of reportable quantities.

1st Year Prior									
Date (month/day/year)	Spill	Leak	Location (Indicated on site map)	Description			Response Procedure		Preventive Measured Taken
				Type of Material	Quantity	Source, if Known	Reason	Amount of Material Recovered	
NONE									
2nd Year Prior									
Date (month/day/year)	Spill	Leak	Location (Indicated on site map)	Description			Response Procedure		Preventive Measured Taken
				Type of Material	Quantity	Source, if Known	Reason	Amount of Material Recovered	
NONE									
3rd Year Prior									
Date (month/day/year)	Spill	Leak	Location (Indicated on site map)	Description			Response Procedure		Preventive Measured Taken
				Type of Material	Quantity	Source, if Known	Reason	Amount of Material Recovered	
NONE									

NON-STORM WATER DISCHARGE ASSESSMENT AND CERTIFICATION LPDES Application Permit Issued August, 2006				Worksheet #5 Completed by: Suresh Sharma Title: Technical Director Date: September 18, 2006	
Date of Test or Evaluation	Outfall Directly Observed During the Test (Identify as indicated on the site map)	Method Used to Test or Evaluate Discharge	Describe Results from Test for the Presence of Non-Storm Water Discharge	Identify Potential Significant Sources	Name of Person Who Conducted the Test or Evaluation
Monthly and Quarterly since August, 2006	001	EPA approved Analytical Methods	Not contaminated	Process wastewater	Edward Hardy
Weekly since August, 2006	101	EPA approved Analytical Methods	Not Contaminated	Process wastewater	Edward Hardy
Monthly since August, 2006	003	EPA approved Analytical Methods	Not Contaminated	Roads, Parking, Property, Rail Yard, Landfill	Edward Hardy
CERTIFICATION					
<p>I, <u>Tim Harris</u> (responsible corporate official), certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.</p>					
<p>A. Name and Official Title (type or print) Tim Harris, Plant Manager</p>			<p>B. Area Code and Telephone No. (226) 775-3040</p>		
<p>C. Signature </p>			<p>D. Date Signed 9-25-2006</p>		

POLLUTANT SOURCE IDENTIFICATION		Worksheet #6 Completed by: <u>Suresh Sharma</u> Title: <u>Technical Director</u> Date: <u>September 18, 2006</u>	
List of all identified storm water pollutant sources and existing management practices that address those sources. The third column, list BMP options that can be incorporated into the plan to address remaining sources of pollutants.			
Storm Water Pollutant Sources	Existing Management Practices	Description of New BMP Options	
1. Soils	Minimize exposed areas, vegetate areas exposed for long periods.	Construct settling basin or hay bails for erosion fences to manage runoff.	
2. Fuel & Oil Spills	Clean up spills quickly.	Construct settling basin to manage runoff from the maintenance area.	
3. Rail Yard	Clean up area	NA	
4. Landscape Maintenance	Cut grass & weeds regularly, minimize herbicide application	NA	
5. Loading/Unloading Areas	Fill inside curb/ dike areas, use absorbent pads, drip pans or other device suitable for the condition, clean up spills quickly	NA	
6. On-site Waste Disposal Areas	Clean up spills quickly, grade roads, check and repair heavy equipment for hydraulic/ oil leaks	NA	



BMP IDENTIFICATION		Worksheet #6a Completed by: <u>Suresh Sharma</u> Title: <u>Technical Director</u> Date: <u>September 18, 2006</u>
Description of the Best Management Practices selected for inclusion in the plan and BMPs, that will be incorporated into facility operations.		
BMPs	Brief Description of Activities	
Good Housekeeping	Facility ground maintenance including, grass cutting, weed control, is conducted regularly. Waste disposal containers staged throughout the property for placement of waste.	
Preventive Maintenance	Site roads are regularly maintained to limit rutting and erosion. Grass is planted in areas of exposed earth that are not active for extended periods of time, shale and limestone cover not paved roads and storage areas. Equipment preventive maintenance program implemented.	
Inspections	Perform documented inspections in accordance with LPDES Permit LA0004464.	
Spill Prevention Response	Spill prevention response is covered in annual employee training. Procedures such as proper notification procedure, using drip pans and proper disposal of waste oil is covered, as well as the location of response equipment.	
Sediment and Erosion Control Measure	All areas of the plant are paved, covered with aggregate material, or planted with vegetation.	
Management of Runoff	All process areas are paved, curbed or sloped, with drainage routed to the wastewater treatment facility.	
Additional BMPs (Activity-specific and Site-specific)	Indoor storage areas for significant materials.	

BMP IDENTIFICATION & IMPLEMENTATION		Worksheet #7 Completed by: <u>Suresh Sharma</u> Title: <u>Technical Director</u> Date: <u>September 18, 2006</u>		
A schedule for implementing each BMP including a brief description of each BMP, the steps necessary to implement the BMP (i.e., any construction or design), the schedule for completing those steps (list dates) and the person(s) responsible for implementation.				
BMPs	Description of Action(s) Required for Implementation	Scheduled Completion Date(s) for Req'd. Action	Person Responsible for Action	Notes
Good Housekeeping	1. Already Implemented	Implemented	All Employees	
	2. Employee Awareness	Implemented	All Employees	
	3.			
Minimizing Exposure	1. Maintain active waste disposal area as small as possible.	Continuous	Operating Depts.	
	2. Indoor storage	Implemented	Operating Depts.	
	3.			
Preventive Maintenance	1. Implemented Heavy Equipment	Implemented	Maintenance Dept.	
	2. Implemented Pumping System	Implemented	Maintenance Dept.	
	3.			
Spill Prevention and Response	1. Employee Training	Implemented	Environmental Dept.	
	2. Onsite Response Team	Implemented	Identified in Plan	
	3.			
Inspections	1. Dike containments	Implemented	Operating Depts.	
	2. Storm Water Outfalls	Implemented	Environmental Dept.	
	3. Facility Inspection	Implemented	Environmental Dept.	
Sediment and Erosion Control	1. Ground maintenance - Cutting, planting	Continuous	Maintenance Services	
	2. Road Maintenance - Aggregate materials, pavement		Maintenance Services	
	3.			
Management of Runoff	1. Storm water contaminated with process wastewater routed to wastewater treatment plant.	Implemented	Engineering	
	2. Road Maintenance - Grading	Continuous	Maintenance Dept.	
	3.			

BMP IDENTIFICATION (Section 2.3.1)		Worksheet #7a Completed by: <u>Suresh Sharma</u> Title: <u>Technical Director</u> Date: <u>September 18, 2006</u>
<b>Instructions:</b> Describe the Best Management Practices that you have selected to include in your plan. For each of the baseline BMPs, describe actions that will be incorporated into facility operations. Also describe any additional BMPs (activity-specific [Chapter 3] and site-specific BMPs [Chapter 4]) that you have selected. Attach additional sheets if necessary.		
BMPs	Brief Description of Activities	
Good Housekeeping	Maintain spill cleanup kits, clean spills immediately, minimize storing of smaller containers outside the building, keep drain valves in the closed position	
Preventive Maintenance	Inspect bulk storage tanks in accordance with API 653 guidance document, inspect all other above ground storage tanks in accordance with manufacturer-recommended integrity testing protocols, and keep drain valves in closed position	
Inspections	Inspect process areas and secondary containment structures, fuel and lubricants storage areas, landfills, loading/unloading areas, and electrical transformer units prior to each shift	
Spill Prevention Response	Maintain a current list of agencies to be notified in the event of a reportable spill Maintain a list of spill response team to be contacted in the event of a reportable spill Maintain a current list of local spill response contractors	
Sediment and Erosion Control Measure	Minimize erosion control by sowing of annual grasses and permanent vegetation for disturbed areas and maintaining it, Adopt appropriate best management practices for storm water control (see Appendix C for recommended BMPs)	
Management of Runoff	Adopt appropriate best management practices for storm water runoff	
Additional BMPs (Activity-specific and Site-specific)	Inspect storm water drainage ditches during storm events	

EMPLOYEE TRAINING		Worksheet #8 Completed by: <u>Suresh Sharma</u> Title: <u>Technical Director</u> Date: <u>September 18, 2006</u>	
Description of the employee training program for the facility to address spill prevention and response, good housekeeping, and material management practices. Also includes a schedule for the training program and list the employees who attend training sessions.			
Training Topics	Brief Description of Training Program/Materials (e.g., film, newsletter, course)	Schedule for Training (list dates)	Attendees
Good Housekeeping	Implement inspection of electrical transformers as part of facility-wide inspections. Inspect after each storm events of 1 inch or more. Update SWP3 annually, if required.	Annual	All Employees
Minimizing Exposure	Integrity inspection of bulk storage tanks per regulatory tank inspection guidelines, integrity inspection of chemical storage tanks per tank manufacturer recommended guidelines.	Annual	Shift Supervisor
Preventive Maintenance	Inspection of storm water drainage ditches after each storm event of 1 inch or more and repair any damage.	Annual	Shift Supervisor
Inspections	Inspection of storm water drainage ditches after each storm event of 1 inch or more.	Annual	Shift Supervisor
Spill Prevention Control and Response	Train employees in spill response and notification of regulatory agencies. Maintain a current list of local spill response contractors. Keep a copy of the facility SPCC plan for spill response activities..	Annual	Shift Supervisor
Sediment and Erosion Control	Maintain a current list of local spill response contractors. Train employees in identifying eroded sections after storm events.	Annual	Shift Supervisor
Management of Runoff	Adopt appropriate best management practices for storm water runoff.	Annual	Shift Supervisor

**APPENDIX H – HAZARDOUS WASTE INSPECTION PLAN AND  
FORMS**

**INSPECTION PLAN  
AND SCHEDULE**

**EXIDE TECHNOLOGIES  
BATON ROUGE RECYCLING PLANT  
BATON ROUGE, LOUISIANA**

**EPA ID NUMBER: LAD 008184137**

August 2006

## **INTRODUCTION**

The Baton Rouge Recycling Plant is a secondary lead smelter and recycler that recycles inorganic lead-bearing materials including spent lead acid batteries. The Baton Rouge plant was issued a Hazardous Waste Operating Permit (LAD008184137) by the Louisiana Department of Environmental Quality (LDEQ) on September 30, 1993. The permit lists inspection schedules for three permitted storage units and one permitted treatment unit. Exide submitted a Class 3 permit modification to add the Containment Building to the Operating Permit.

This plan and schedule was developed to meet the requirements specified in LAC 33:V.1509 and 40CFR264.15. The plan is designed to detect malfunctions and deteriorations, operator errors, and discharges that may cause a release of hazardous waste or a threat to human health.

## **TYPES OF INSPECTIONS**

### **Daily Inspections**

The Environmental Manager or his designate performs daily inspections of the material storage areas, the loading and unloading docks, the wastewater treatment area, and the leachate collection systems. These inspections are required by the Hazardous Waste Permit and Best Management Practices/Stormwater Pollution Prevention Plan (SWPPP). The results of this inspection are documented on the form included in Appendix A and kept in the environmental files.

The Environmental Manager or his designate will perform daily opacity inspections and baghouse operation inspections. These inspections are required as a part of the Air Permit. The results of the inspections are documented on the forms included in Appendix B and kept in the environmental files.

Routine visual inspections of onsite tanks and transfer equipment are performed on a daily basis as required by the Spill Prevention Control and Countermeasure Plan (SPCC Plan).

### **Weekly Inspections**

The Environmental Manager or his designate conducts a weekly inspection of all permitted hazardous waste units.

The Truck/Trailer area is a permitted storage area where spent lead-acid batteries are stored on pallets in trucks prior to recycling. This unit will be inspected to insure that the container and trailers are structurally sound with covers or tops in place, there are no cracks on the base or pooled water in the sump, the warning signs are in place and that the run-on-runoff system is working. The contents of any trailer judged to be structurally unsound will be immediately transferred to another trailer or recycled.

The Whole Battery Storage area is a permitted storage area where spent lead-acid batteries are stored on pallets prior to recycling. This unit will be inspected weekly to be sure that the containers are structurally sound, there are no cracks or gaps in the base, and that the warning signs are in place. Any cracked or broken batteries will be either over-packed or recycled.

The K069 Container storage area is a permitted storage area where drums containing K069 and D008 wastes are stored on pallets. Drums containing 90-day nickel-cadmium batteries will also be inspected. The drum storage areas will be inspected for structurally sound containers with covers in place, that the containers are on pallets, there is no accumulated water in the storage area, and the containers are properly labeled. Any unsound container will be replaced or recycled as soon as possible, but no later than five calendar days after detection. Any uncovered container will be covered immediately.

The Slag Stabilization area is a permitted waste treatment unit that crushes and chemically stabilizes spent blast furnace slag. This unit will be inspected for warning signs in place, no cracks or gap in the base, no visible air emissions, no spills, and that the runoff system is working. Any air emissions will be terminated immediately. Any repairs or upgrades will be accomplished in the shortest possible time. The Environmental manager will also be sure that all permit required TCLP and air monitoring samples have been collected, analyzed and are on file.

The Containment Building will be inspected for free liquids, visible emissions, tracking, and release of hazardous waste. Additionally, the leak detection system, the liquid collection system, the heights of the stored materials will be checked and the air handling system. Any corrective action necessary will be completed at the earliest possible time.

These weekly inspection results are documented on the forms included in Appendix C and kept in the environmental files.

### **Monthly Inspections**

A monthly inspection of the closed hazardous waste cells and associated monitoring wells, the fire protection systems, the telephone and alarm systems and the special respirators is conducted by the Environmental Manager or his designate. The results of this inspection are documented on the form included in Appendix C and kept in the environmental files.

Additional monthly inspections performed at the Baton Rouge smelter include, Containment Structure & Tank Inspection as required by the facility SPCC plan and continuous in-coming material inspections required by the Waste Analysis Plan. The results of this inspection are documented on the form included in Appendix D and kept in the environmental files.

### **Rain Event Inspection**



After each rain event inspection of containment structures outside the process area is conducted the form used for Quarterly Inspections is used (Containment Structure & Tank Inspection). The results of this inspection are documented on the form included in Appendix D and kept in the environmental files.

## **INSPECTION SCHEDULE**

As stated above, daily weekly and monthly inspections are performed at the Baton Rouge smelter. The inspection schedule is detailed below:

- Daily inspection of the wastewater treatment area, the leachate collection system, the unloading areas, and the material storage area. Along with baghouse functions and opacity.
- Weekly inspections of all of the permitted hazardous waste storage areas, the Truck/Trailer storage area, the Whole Battery Storage area, the K069 storage area, the Slag Stabilization unit, the Containment Building, and the NiCad Battery storage.
- Monthly inspections are conducted at the two closed hazardous waste cells, the plant alarm and fire protection equipment, and the special respirators.
- Monthly inspections are conducted for tanks.
- Each rain event – containment areas outside the process area
- Annual Cap inspection to be completed for two closed Haz-Waste Cells by a registered PE
- Continuous inspections of in-coming materials.

These inspections may be performed on a more frequent basis depending on operating conditions or other circumstances.

## **TYPES OF PROBLEMS**

The types of problems that are expected to be encountered can include equipment malfunctions, spills, material handling, labeling and notification problems, or container deterioration. The Weekly and Monthly Inspection Form in Appendix C lists common, expected problems for each area. The Daily Inspection Form in Appendix A simply lists the areas. The inspector will check those areas for any problems, such as leaks, spills, hazardous waste stored in a non-permitted area, warning signs in place, and structural integrity of the unit.

If any problems or malfunctions are noted during the inspection, repair and corrective action will begin immediately to correct the problem and remedy the situation. Repairs and corrective action will be noted on the inspection forms.

## **INSPECTION LOG DOCUMENTATION**

The inspection logs will be kept in the Environmental Departments files for at least three years from the date of inspection. The inspection records will include the date and time of the inspection, the name of the inspector, a notation of the observations made, and the date and nature of any repairs for remedial actions.

[illegible][illegible]

**Exide Technologies  
Baton Rouge Facility  
Daily Opacity Inspection**

[illegible]

**X - No visible emissions from stack.**

# EXIDE TECHNOLOGIES - BATON ROUGE FACILITY

## HAZARDOUS WASTE INSPECTION SCHEDULE

### MONTHLY AND WEEKLY

[illegible]

**EXIDE TECHNOLOGIES - BATON ROUGE FACILITY**  
**HAZARDOUS WASTE INSPECTION SCHEDULE**  
**MONTHLY AND WEEKLY**

DATE/TIME											
INSPECTOR											
STATUS	OK	NOK	OK	NOK	OK	NOK	OK	NOK	OK	NOK	OK
<b>TRUCK/TRAILER AREA</b>											
1. Containers and trailers are structurally sound with covers or tops in place.											
2. There are no cracks, gaps or pooled water on the base nor accumulated water in sump.											
3. Warning signs are in place.											
4. Runon-runoff system works.											
<b>WHOLE BATTERY CONTAINER AREA</b>											
1. Containers are structurally sound with covers in place.											
2. There are no cracks, gaps or pooled water on the base nor accumulated water in sump.											
3. The warning signs are in place.											
<b>K069 CONTAINER AREA</b>											
1. Containers are structurally sound with covers in place.											
2. The containers are on pallets and above any liquid on the floor.											

DATE AND NATURE OF REPAIRS OR ACTIONS: \_\_\_\_\_

**MONTHLY**

1. Closed area, Security, Monitoring Wells;

Date \_\_\_\_\_ Time \_\_\_\_\_ Inspector \_\_\_\_\_

- a. No apparent clay cap erosion.
- b. Leachate collection system operating properly.
- c. No ants, termites, or burrowing animals detrimental to clay cap.
- d. Seal around monitoring well is unbroken.
- e. No holes or breaks in monitoring well casing /covers.
- f. Warning signs, security fences in place.

OK	Other

2. Safety Communication Equipment;

Date \_\_\_\_\_ Time \_\_\_\_\_ Inspector \_\_\_\_\_

- a. Each fire hose, extinguisher is operable and accessible.
- b. Telephone and alarm system is operable.
- c. Special respirator is operable.

OK	Other

DATE AND NATURE OF REPAIRS OR ACTIONS: \_\_\_\_\_

# Containment Structure & Tank Inspection

## Outside Process Area

Date \_\_\_\_\_

Complete after each rain event or once per month

ID	Area	Tank Capacity	Structure	Leakage	Empty/ Pooled Liquid	Tank Integrity	Fill Pipe/ Connections	Drain Valve Closed/Open	Comments
To Be Completed by Environmental Department									
	Maintenance area								
	Fuel Area								
	Fire Pumps								
	Sulfuric acid tank area								
	Caustic tank area								

✓ = Ok, Good Condition  
X = Needs Attention

When Drained to Ground or Open Ditch, The Discharge Inspection Log must be completed

Inspector \_\_\_\_\_

Submit to Environmental Department when complete

**APPENDIX I – CONTAINMENT STRUCTURE REQUIREMENTS  
AND GUIDELINES**



## Appendix I

### Containment Structure Requirements and Guidelines

Containment structures are required to be used when:

- Chemical spill or release can come into direct contact with soil or rocks (no concrete or asphalt pavement)
- Chemical storage is outside of the wastewater treatment sewer infrastructure
- Chemical spill or release can enter stormwater outfalls
- Chemical spill or release has the potential to negatively impact the wastewater treatment system
- Required by regulations such as BMP's, i.e. oil and lubricants

When containment is required the following structures will be in-place at a minimum:

- When structure is required to prevent release impact to the soil, curbing may be used to direct release to storm drain
- When structure is required to capture spill or release:
  - Containment construction shall be made of material compatible with chemical, examples:
    - Steel or concrete for fuels
    - Concrete with protective coating for corrosive chemicals
    - Plastic for pigments, dyes
  - Containment must be of sufficient size to hold entire tank contents of the largest single tank plus sufficient precipitation freeboard (design for 110% of single largest tank)
  - Loading /unloading connections shall be inside the containment
  - Drain shall have a valve with threaded end cap in place

Containment structures shall be inspected as directed in Appendix B

**RESPONSE  
ATTACHMENT A8**

## **APPENDIX 8**

### **FACILITY CLOSURE PLAN**

**FACILITY CLOSURE PLAN**

**EXIDE TECHNOLOGIES, BATON ROUGE RECYCLING  
PLANT**

**LAD008184137**

**October 2006**

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Table 1A - Supplemental Closure Cost Information, Slag Stabilization Area
Table 1B - Supplemental Closure Cost Information, Containment Building
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Table 2 - Post-Closure Care Cost Estimate

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Figure 1 - Site Map
Figure 2 - Containment Building

## 1.0 INTRODUCTION

The Baton Rouge Recycling Plant has developed this Revised Closure Plan in accordance with Chapter 35 of the Louisiana Department of Environmental Quality – Hazardous Waste Division (LDEQ-HWD) Environmental Regulatory Code. This closure plan includes a section describing the facility background and operations, the closure methodologies for each permitted hazardous waste unit, and a closure and post-closure cost estimate. The cost estimates were prepared in accordance with Chapter 37 of the LDEQ-HDW Environmental Regulatory Code.

This revised Closure Plan is being submitted to update the closure cost estimates. The revised closure cost estimates are listed on Table 1, and described in Section 4.0.

## 2.0 BACKGROUND

The Baton Rouge facility is located at 2400 Brooklawn Drive, in East Baton Rouge Parish, Louisiana. This facility is a secondary lead smelter and refinery which recycles inorganic lead-bearing materials into lead pig and block ingots, which are sold to customers for use in making batteries, weights, bearings, ammunition, and chemicals. The facility has been in operation since early 1969.

Most of the raw materials used by the Baton Rouge facility to produce lead are purchased off-site. The lead-bearing raw materials are delivered to the facility in trucks or trailers and are unloaded at the loading dock. Lead acid batteries are either fed directly into the battery breaker or are stored temporarily in permitted storage areas (the truck/trailer storage area and the whole battery storage area). Other lead-bearing materials are received in drums. These drums will either be emptied into a feed-stock pile in the containment building or held temporarily in the K069/D008 storage area. Lead acid batteries are processed by cutting the batteries, separating them into individual components. The lead-rich paste is stored in the containment building prior to smelting. The facility operates one blast furnace and one reverbatory furnace that are used to smelt the lead-bearing raw materials. The molten lead is cast into ingots using two casting machines. The lead ingots are loaded into trucks and transported for sale on the open market. As a part of the lead recycling process, a blast furnace slag is produced. This slag contains mostly iron, silica and calcium oxides. The slag is treated by mixing with Portland cement and sodium silicate and is placed into a permitted solid waste landfill.

On September 30, 1993 the facility was issued a Final Operating Permit (No.LAD008184137-OP-1) by the LDEQ-HWD. The Baton Rouge smelter has three permitted hazardous waste storage areas, three existing storage areas, (the truck/trailer storage area, the K069/D008 storage area and the whole battery storage area). The facility has one existing permitted treatment area, the slag stabilization area. Exide also has a containment building that is used to store raw materials prior to recycling. All of these units are shown on the site map presented on Figure 1.

### 3.0 CLOSURE PROCEDURES

#### 3.1 GENERAL

The hazardous waste units at the facility will be clean closed. No hazardous waste or waste residual will be left at a closed unit. The closure procedures described herein are based on a third party contractor or consultant performing the closure activities. Personnel, equipment or resources from the Baton Rouge facility will not be used in any manner as a part of the closure procedures. For each hazardous waste unit, the closure procedures will describe:

- closure methodologies for the specific units,
- maximum inventory of hazardous materials at each unit,
- a description of how the hazardous material will be removed from the unit,
- a description of the decontamination procedures to be used for each unit,
- confirmation sampling procedures to be followed at each unit to confirm clean closure.

For each area, the following decontamination methods will be used:

1. Equipment destined for resale/reuse shall be cleaned until visually clean.
2. Debris such as structural steel destined for recycling shall be cleaned until visually noticeable contamination has been removed.
3. Debris such as wood, masonry, rubble, etc., destined for land disposal at a permitted facility must meet the acceptance criteria of the facility. Material characterized as hazardous waste will be disposed at a permitted hazardous waste disposal facility and material characterized as non-hazardous waste will be disposed at a permitted solid waste facility. The type and amount of characterization sampling shall be determined by the receiving facility.



4. The adequacy of cleaning for building components and other structures that remain on site will be determined using the wash water evaluation method.

### 3.2 THE SLAG STABILIZATION UNIT

The slag stabilization unit is a hazardous waste treatment unit. As a part of recycling spent lead batteries, a blast furnace slag is generated. After the slag is allowed to cool, it is treated at the slag stabilization unit. The slag is crushed to small diameter, and then treated by mixing with Portland cement and sodium silicate and is placed into a permitted solid waste landfill (GD-033-2054/P0326). Stabilized slag is sampled and analyzed using the Toxicity Characteristic Leaching Procedure (TCLP) at least quarterly. It is planned that the slag stabilization unit will continue to operate for the lifetime of the Baton Rouge smelter. Partial closure of this unit is not anticipated.

Closure of this unit will involve removal of all slag, disposal of the slag in a permitted hazardous waste landfill, decontamination of the area and confirmation that clean closure has been achieved.

The maximum inventory of slag at the slag stabilization unit was calculated to be 144.4 tons, as shown on Table 1A. The residual slag will be loaded into lined end dump trailers. An off-site contractor using rented or contractor supplied front-end loaders will complete the loading. The trailers will transport the slag off-site to a permitted hazardous waste disposal site.

Once the residual slag has been removed, the entire slag stabilization area along with the slag crusher feed vessel will be decontaminated using steam cleaners or pressure washers. The front-end loader used to load the slag will also be decontaminated. The wash water will be collected in third-party supplied trailers and transported for off-site disposal. Grab samples of the wash water will be collected from the last flush of decontamination water by filling a laboratory supplied container at a sump or low point. The sample will be analyzed and compared to the performance standards provided in Section 3.7 to determine if the decontamination process is complete. It is estimated that 23,500 gallons of wash water will be generated, contained,

transported and disposed. Personal protective equipment for the decontamination crew will include; respirators with particle cartridges, tyvek suits, gloves and hardhats with splashguards.

Once decontamination is complete, five (5) confirmation soil samples will be collected and analyzed. The actual location of the samples will be selected by the Professional Engineer responsible for the closure certification. The samples will be collected by drilling through the concrete and collecting soil samples for lead analysis. Soil samples will be collected from 0-12 inches below the floor system. A certification report will be prepared and certified by an independent registered professional engineer, stating the facility was closed in accordance the approved closure plan.

### 3.3 THE CONTAINMENT BUILDING

The containment building stores lead-bearing raw materials that will be recycled in the blast or reverbatory furnaces. The building is divided into areas where particular feedstock or slag is stored. The building is completely enclosed and ventilated. It is planned that the containment building will continue to operate for the lifetime of the Baton Rouge smelter. Partial closure of the containment building is not anticipated.

The maximum inventory of slag in the containment building was calculated to be 3,333 tons, as detailed in Table 1B. The residual slag will be loaded into lined end dump trailers. An off-site contractor using rented or contractor supplied front-end loaders will complete the loading. The trailers will transport the slag off-site to a permitted hazardous waste disposal site.

The maximum inventory of battery components and other lead-bearing materials has been calculated to be 12,080 tons, as shown on Table 1B. This material will be loaded into vehicles and transported to another lead smelter for recycling.

Once all of the residual slag and the lead-bearing raw materials have been removed, a sweeper truck will be used to clean any residual material. After sweeping, the walls and floor of the containment building will be decontaminated using steam cleaners or pressure washers. The front-end loaders used to load the inventory and the sweeper truck will also be decontaminated.

The wash water will be collected in third-party supplied trailers and transported for off-site disposal. Grab samples of the wash water will be collected from the last flush of decontamination water by filling a laboratory supplied container at a sump or low point. The sample will be analyzed and compared to the performance standards provided in Section 3.7 to determine if the decontamination process is complete. It is estimated that 324,500 gallons of wash water will be generated, contained, transported and disposed. Personal protective equipment for the decontamination crew will include; respirators with particle cartridges, tyvek suits, gloves and hardhats with splashguards.

Once decontamination is complete, ninety (90) confirmation samples will be collected and analyzed. The actual location of the samples will be selected by the Professional Engineer responsible for the closure certification. The samples will be collected by drilling through the concrete and collecting soil samples for analysis. Samples will be collected from 0-12 inches below the floor system. In the Paste Storage area of the containment building, a hoe ram will be brought in to break-through the acid brick floor and one of the samples should be collected from the surface of the original floor. A certification report will be prepared and certified by an independent registered professional engineer. The report will certify that the containment building was closed in accordance the approved closure plan.

#### 3.4 K069/D008 STORAGE AREA

The K069/D008 storage area is located in the western portion of the containment building. This area is used to hold drums containing lead-bearing materials purchased from outside sources, until the material is recycled and non-conforming batteries. The drums are inspected to insure that free liquid is not present. The floor of this storage area is constructed of concrete with no cracks or gaps. The floors are sloped to drain into a sump. The drums are stacked on pallets, two pallets high, four drums to a pallet. The K069/D008 storage area is an integral part of the facility operation. Closure of this unit is not anticipated. However, this unit may be relocated at a later date.

The maximum inventory of material in the K069/D008 storage area is 544 drums or 29,920 gallons. The inventory will be loaded into vehicles using a fork lift and transported to another lead smelter for recycling.

The area will be decontaminated using steam cleaners or pressure washers. The wash water will be collected in third-party supplied trailers and transported for off-site disposal. Grab samples of the wash water will be collected from the last flush of decontamination water by filling a laboratory supplied container at a sump or low point. The sample will be analyzed and compared to the performance standards provided in Section 3.7 to determine if the decontamination process is complete. It is estimated that 5,750 gallons of wash water will be generated, contained, transported and disposed. Personal protective equipment for the decontamination crew will include; respirators with particle cartridges, tyvek suits, gloves and hardhats with splashguards.

Once decontamination is complete, 2 confirmation samples will be collected and analyzed. The actual location of the samples will be selected by the Professional Engineer responsible for the closure certification. The samples will be collected by drilling through the concrete and collecting soil samples for analysis. Soil samples will be collected from 0-12 inches below the floor system. A certification report will be prepared and certified by an independent registered professional engineer, stating the K069/D008 storage area was closed in accordance the approved closure plan.

### 3.5 TRUCK/TRAILER STORAGE AREA

Batteries that are received at the facility are either unloaded at the loading dock or are stored in the truck/trailer storage area. Batteries at the truck/trailer storage area are stored on pallets prior to being processed in the battery breaking area. It is planned that the Truck/Trailer storage area will continue to operate for the lifetime of the Baton Rouge plant. Partial closure of this area is not anticipated.

The maximum inventory of batteries stored in this area is 85,000 batteries, or 85,000 gallons. The inventory is already loaded on trailers; however, time has been allotted for restacking and ordering the loaded batteries. The batteries will be transported to another lead smelter for recycling.

The area will be decontaminated using steam cleaners or pressure washers. The wash water will be collected in third-party supplied trailers and transported for off-site disposal. Grab samples of the wash water will be collected from the last flush of decontamination water by filling a laboratory supplied container at a sump or low point. The samples will be analyzed and compared to the performance standards provided in Section 3.7 to determine if the decontamination process is complete. It is estimated that 17,280 gallons of wash water will be generated, contained, transported and disposed. Personal protective equipment for the decontamination crew will include; respirators with particle cartridges, tyvek suits, gloves and hardhats with splashguards.

Once decontamination is complete, fifteen (15) confirmation samples will be collected and analyzed. The actual location of the samples will be selected by the Professional Engineer responsible for the closure certification. The samples will be collected by drilling through the concrete and collecting soil samples for analysis. Samples will be collected from 0-12 inches below the floor system. A certification report will be prepared and certified by an independent registered professional engineer. The closure report will state the truck/trailer storage area was closed in accordance the approved closure plan.

### 3.6 THE WHOLE BATTERY STORAGE AREA

The whole battery storage area is used to store batteries prior to processing them. The batteries are stored on pallets. No closure date for this unit has been designated, and partial closure is not expected.

The maximum inventory of spent batteries is 121,500 batteries or 121,500 gallons. The inventory will be loaded into vehicles using a fork lift and transported to another lead smelter for recycling.

The area will be decontaminated using steam cleaners or pressure washers. The wash water will be collected in third-party supplied trailers and transported for off-site disposal. Grab samples of the wash water will be collected from the last flush of decontamination water by filling a laboratory supplied container at a sump or low point. The samples will be analyzed and compared to the performance standards provided in Section 3.7 to determine if the decontamination process is complete. It is estimated that 9,500 gallons of wash water will be generated, contained, transported and disposed. Personal protective equipment for the decontamination crew will include; respirators with particle cartridges, tyvek suits, gloves and hardhats with splashguards.

Once decontamination is complete, eight (8) confirmation samples will be collected and analyzed. The actual location of the samples will be selected by the Professional Engineer responsible for the closure certification. The samples will be collected by drilling through the concrete and collecting soil samples for analysis. Samples will be collected from 0-12 inches below the floor system. A certification report will be prepared and certified by an independent registered professional engineer, stating the whole battery storage area was closed in accordance the approved closure plan.

### 3.7 PERFORMANCE STANDARDS

Decontamination water samples from the Slag Stabilization Unit, Containment Building, K069/D008 Storage Area, Truck/Trailer Storage Area and Whole Battery Storage Area will be analyzed for compliance with the following performance standards:

- |   |          |            |
|---|----------|------------|
| • | Lead     | 0.050 mg/l |
| • | Arsenic  | 0.050 mg/l |
| • | Chromium | 0.050 mg/l |
| • | Cadmium  | 0.010 mg/l |
| • | Mercury  | 0.002 mg/l |

The decontamination water performance standards are the LAC 33:IX Subpart 1 Human Health Protection Drinking Water Supply standards which apply to surface water bodies designated as drinking water supply and also protect for primary and secondary contact recreation and fish consumption.

Soil samples from the Slag Stabilization Unit, Containment Building, K069/D008 Storage Area, Truck/Trailer Storage Area and Whole Battery Storage Area will be analyzed for compliance with the following performance standards:

- Total Lead 1,400 mg/kg
- Total Arsenic 12 mg/kg
- Total Chromium 310,000 mg/kg
- Total Barium 14,000 mg/kg
- Total Cadmium 100 mg/kg
- Total Silver 1,000 mg/kg
- Total Selenium 1,000 mg/kg
- Total Mercury 61 mg/kg
- Total Antimony 82 mg/kg
- Total Sulfate Background to be determined at closure
- pH 6.0 to 10.0 units

Soil performance standards are the LDEQ Risk Evaluation/Corrective Action Program (RECAP) Screening Option standards for industrial soils. The background performance standard for total sulfate will be determined at closure for industrial scenario in accordance with the RECAP. The background standard will be applied as the Screening Option standard. Four soil samples will be collected from nearby areas at similar elevation for total sulfate analysis to calculate the background standard. The pH performance standards is the applicable discharge limits in the facility LPDES permit No. LA0004464.

#### 4.0 CLOSURE COST ESTIMATES

It is estimated that the cost of closing the permitted and interim status hazardous waste units at the facility, as described in this closure plan, is approximately \$1,610,234.71 including 10% contingency. A detailed cost estimate is provided in Table 1. The detailed cost estimate was calculated in accordance with the requirements of LAC 33:V.3705. The cost estimate is based on the following assumptions:

- The cost is estimated in current dollars, as of December 2000 and was adjusted for inflation to 2006.
- Closure costs are based on hiring third party contractors and consultants to close the units.
- Closure costs do not include any salvage value from the sale of hazardous waste, structures, land or other assets.

A breakdown of the closure costs for each unit is included. Table 1A presents the detailed cost estimate for the slag stabilization area. Table 1B presents the detailed cost estimate for the containment building. The detailed cost estimate for the K069/D008 storage area is presented on Table 1C. Table 1D lists the detailed cost estimate for the truck/trailer area and Table 1E has the whole battery storage area cost breakdown. Each of these tables lists the following information:

- the calculations to determine the maximum inventory;
- the unit cost of loading, transporting and disposing of the maximum inventory;
- the dimensions of the unit to be decontaminated;
- the number of people needed to complete decontamination of the unit;
- the calculation for the amount of wash water generated during decontamination;



- the number of water and soil confirmation samples to be collected at the closed unit;
- the type and amount of equipment that needs to be rented for closure activities; and,
- the cost of preparing a closure certification report for each unit.

The unit cost for loading of batteries differ between Tables 1D and 1E as the batteries at the Truck/Trailer area are already in trailers and only require inspection prior to shipment while the batteries at the Whole Battery Storage Area require loading of the pallets onto trucks. The unit cost for decontamination product rates and water usage vary depending on the estimated level of effort required. The closure cost estimate has been used to update Financial Assurance for the Baton Rouge smelter.

## 5.0 POST-CLOSURE CARE

The Baton Rouge smelter has two units in post-closure care, Closed Waste Pile No.1 and Closed Waste Pile No. 2. Figure 1 shows the locations of these units. The units are slag disposal areas that were closed in-place in 1985 and 1986. Original date of certification of closure was October 27, 1986. LDEQ concurred by letter dated December 28, 1995 that Waste Piles No. 1 and No. 2 were closed in accordance with the approved Facility Closure Plan dated July 20, 1984. Post closure care has been ongoing for 20 years at this time. The Post-Closure Permit was issued in December 1995.

Post-closure care of these units involves maintenance of the cap and groundwater monitoring. Cap maintenance includes top-soil maintenance, fertilizing, reseeding, and grass cutting and upkeep. Cap integrity inspections will be performed and an annual certification by an engineer will be completed, documenting the integrity of the caps. Groundwater monitoring activities include purging and sampling 7 monitoring wells twice per year, collection and analysis of groundwater samples and preparation of a semi-annual report. One well MW-1R is located up gradient of the closed units, and six wells, MW-4R, MW-12R, MW-13R, MW-16, MW-17 and MW-18 are located down gradient of the closed units. The groundwater samples from each well will be analyzed for chloride, sulfate, lead, cadmium, manganese, sodium, iron, pH and specific conductance. The semi-annual report will contain the analytical data, potentiometric maps and a summary of the groundwater quality for the closed units.

Table 2 presents the post-closure care cost estimates. The estimated remaining post-closure care cost is \$78,210 including 10% contingency. These estimates were prepared in accordance with LAC 33:V.3709, using current dollar values as of December 2000 and adjusted for inflation to 2006. The estimates are based on hiring third-party contractors or consultants to perform the post-closure activities.

## TABLES

**TABLE 1**  
**SUMMARY OF CLOSURE COSTS**

Description	Units	Unit Cost	Total Cost
<b>A. Slag Stabilization Area</b>			
1 Loading of Residual Slag (144.4 tons)	144.4	\$2.00	\$288.80
2 Transportation of Residual Slag (144.4 tons)	144.4	\$27.50	\$3,971.00
3 Disposal of Residual Slag (144.4 tons)	144.4	\$150.00	\$21,660.00
4 Facility Decontamination (10 hours)	10	\$127.00	\$1,270.00
Slag Vessel Decontamination	1	\$500.00	\$500.00
5 Water Sample Collection	5	\$50.00	\$250.00
6 Water Sample Analysis (including QA/QC samples)	6	\$140.78	\$844.68
7 Transportation of Wash Water (5 loads)	5	\$326.00	\$1,630.00
8 Disposal of Wash Water (23,500 gallons)	23,500	\$0.15	\$3,525.00
9 Personal Protective Equipment	6	\$45.00	\$270.00
10 Confirmation Soil Sampling	5	\$500.00	\$2,500.00
11 Soil Sample Analysis (including QA/QC samples)	6	\$367.04	\$2,202.24
12 Equipment Lease			
a. Front End Loader	1	\$125.00	\$125.00
b. Steam Cleaners	5	\$45.00	\$225.00
13 Certification	1	\$5,000.00	\$5,000.00
<b>Subtotal - A</b>			<b>\$44,261.72</b>

**TABLE 1**  
**SUMMARY OF CLOSURE COSTS**

Description	Units	Unit Cost	Total Cost
<b>B. Containment Building</b>			
1 Inventory Disposal - Residual Slag			
a. Loading Inventory (3,333 tons)	3,333	\$2.00	\$6,666.00
b. Transportation of Inventory (3,333 tons)	3,333	\$27.50	\$91,657.50
c. Disposal of Inventory (3,333 tons)	3,333	\$150.00	\$499,950.00
Inventory Removal - Lead Material for Reuse			
d. Loading Inventory (12,080 tons)	12,080	\$2.00	\$24,160.00
e. Transportation of Inventory (12,080 tons)	12,080	\$18.00	\$217,440.00
2 Facility Decontamination			
a. Sweeping (10 hours)	10	\$18.00	\$180.00
b. Decontamination (46 hours)	46	\$397.00	\$18,262.00
3 Water Sample Collection	65	\$50.00	\$3,250.00
4 Water Sample Analysis (including QA/QC samples)	68	\$140.78	\$9,573.04
5 Transportation of Wash Water (65 loads)	65	\$326.00	\$21,190.00
6 Disposal of Wash Water (324,500 gallons)	324,500	\$0.15	\$48,675.00
7 Confirmation Soil Sampling	90	\$650.00	\$58,500.00
8 Personal Protective Equipment	273	\$45.00	\$12,285.00
9 Soil Sample Analysis (including QA/QC samples)	94	\$367.04	\$34,501.76
10 Equipment Lease			
a. Front End Loaders	2	\$125.00	\$250.00
b. Steam Cleaners	20	\$360.00	\$7,200.00
c. Hoe Ram	1	\$400.00	\$400.00
d. Sweeper	1	\$1,300.00	\$1,300.00
11 Certification	1	\$9,000.00	\$9,000.00
<b>Subtotal B</b>			<b>\$1,064,440.30</b>

**TABLE 1**  
**SUMMARY OF CLOSURE COSTS**

Description	Units	Unit Cost	Total Cost
<b>C. K069/D008 Storage Area</b>			
1 Inventory Disposal			
a. Loading Inventory (544 55-gallon Drums)	544	\$0.45	\$244.80
b. Transportation of Inventory (544 Drums)	544	\$15.00	\$8,160.00
2 Facility Decontamination (4 hours)	4.0	\$73.00	\$292.00
3 Water Sample Collection	2	\$50.00	\$100.00
4 Water Sample Analysis (including QA/QC samples)	3	\$140.78	\$422.34
5 Transportation of Wash Water (2 load)	2	\$326.00	\$652.00
6 Disposal of Wash Water (5,750 gallons)	5,750	\$0.15	\$862.50
7 Confirmation Soil Sampling	2	\$500.00	\$1,000.00
8 Personal Protective Equipment	3	\$45.00	\$135.00
9 Soil Sample Analysis (including QA/QC samples)	3	\$367.04	\$1,101.12
10 Equipment Lease			
a. Fork Lift	1	\$75.00	\$75.00
b. Steam Cleaners	2	\$45.00	\$90.00
11 Certification	1	\$4,000.00	\$4,000.00
<b>Subtotal C</b>			<b>\$17,134.76</b>

**TABLE 1**  
**SUMMARY OF CLOSURE COSTS**

Description	Units	Unit Cost	Total Cost
<b>D. Truck/Trailer Storage Area</b>			
1 Inventory Disposal			
a. Loading Inventory (85,000 batteries)	85,000	\$0.01	\$850.00
a. Transportation of Inventory (85,000 batteries)	85,000	\$0.42	\$35,700.00
2 Facility Decontamination (6 hours)	6	\$109.00	\$654.00
3 Water Sample Collection	4	\$50.00	\$200.00
4 Water Sample Analysis (including QA/QC samples)	5	\$140.78	\$703.90
5 Transportation of Wash Water (4 loads)	4	\$326.00	\$1,304.00
6 Disposal of Wash Water (17,280 gallons)	17,280	\$0.15	\$2,592.00
7 Confirmation Soil Sampling	15	\$500.00	\$7,500.00
8 Personal Protective Equipment	5	\$45.00	\$225.00
9 Soil Sample Analysis (including QA/QC samples)	17	\$367.04	\$6,239.68
10 Equipment Lease			
b. Steam Cleaners	4	\$45.00	\$180.00
11 Certification	1	\$3,500.00	\$3,500.00
<b>Subtotal D</b>			<b>\$59,648.58</b>

**TABLE 1**  
**SUMMARY OF CLOSURE COSTS**

Description	Units	Unit Cost	Total Cost
<b>E. Whole Battery Storage Area</b>			
1 Inventory Disposal			
a. Loading Inventory (121,500 batteries)	121,500	\$0.05	\$6,075.00
b. Transportation of Inventory (121,500 batteries)	121,500	\$0.42	\$51,030.00
2 Facility Decontamination (8 hours)	8	\$91.00	\$728.00
3 Water Sample Collection	3	\$50.00	\$150.00
4 Water Sample Analysis (including QA/QC samples)	4	\$140.78	\$563.12
5 Transportation of Wash Water (3 loads)	3	\$326.00	\$978.00
6 Disposal of Wash Water (14,900 gallons)	14,900	\$0.15	\$2,235.00
7 Confirmation Soil Sampling	12	\$500.00	\$6,000.00
8 Personal Protective Equipment	4	\$45.00	\$180.00
9 Soil Sample Analysis (including QA/QC samples)	14	\$367.04	\$5,138.56
10 Equipment Lease			
a. Fork Lift	1	\$75.00	\$75.00
b. Steam Cleaner	3	\$45.00	\$135.00
11 Certification	1	\$3,500.00	\$3,500.00
<b>Subtotal E</b>			<b>\$76,787.68</b>
<b>CLOSURE COSTS</b>			<b>\$1,262,273.04</b>
10% CONTINGENCY			\$126,227.30
<b>TOTAL CLOSURE COSTS</b>			<b>\$1,388,500.34</b>

Inflation adjusted for 2001 (2.5%)	\$1,423,212.85
Inflation adjusted for 2002 (2.5%)	\$1,458,793.17
Inflation adjusted for 2003 (2.5%)	\$1,495,263.00
Inflation adjusted for 2004 (2.5%)	\$1,532,644.58
Inflation adjusted for 2005 (2.5%)	\$1,570,960.69
Inflation adjusted for 2006 (2.5%)	\$1,610,234.71



**TABLE 1A**

**SUPPLEMENTAL CLOSURE COST INFORMATION  
SLAG STABILIZATION AREA**

**A. INVENTORY DISPOSAL**

1. Maximum quantity of residual slag to be removed and disposed off-site.

$$\begin{aligned}20'w \times 15'l \times 10'h &= 3,000 \text{ ft}^3 \\ 1,800\text{ft}^3 / 27\text{ft}^3/\text{yd}^3 &= 111.1 \text{ yd}^3 \\ 66.7\text{yd}^3 \times 1.2 \text{ tons/yd}^3 &= 144.4 \text{ tons}\end{aligned}$$

2. Unit cost to dispose of residual slag.

$$\begin{aligned}\text{Loading: } & \$2.00/\text{ton} \times 144.4 \text{ tons} = \$288.80 \\ \text{Transportation: } & \$27.50/\text{ton} \times 144.4 \text{ tons} = \$3,971.00 \\ \text{Disposal: } & \$150.00/\text{ton} \times 144.4 \text{ tons} = \$21,660.00\end{aligned}$$

$$\text{Total cost for inventory disposal} = \$25,919.80$$

**B. DECONTAMINATION OF SLAG STABILIZATION AREA**

1. Total surface area to be decontaminated.

$$174'l \times 27'w = 4,700\text{ft}^2 \text{ of surface area to be decontaminated.}$$

2. Unit cost of decontamination.

$$\begin{aligned}\text{Crew} &= 1 \text{ supervisor } (\$37.00/\text{hour}) \text{ and } 5 \text{ laborers } (\$18.00/\text{hour each}) \\ 100 \text{ ft}^2/\text{hour} \times 5 \text{ laborers} &= 500 \text{ ft}^2/\text{hour} \\ 4,700\text{ft}^2 / 500 \text{ ft}^2/\text{hour} &= 9.5 \text{ hours} \\ \text{Plus } 0.5 \text{ hours for equipment decontamination} & \\ 10 \text{ hours} \times \$127.00 &= \$1,270.00\end{aligned}$$

3. Decontamination of the slag crusher feed vessel.

$$1 \text{ feed vessel} \times \$500.00 \text{ decontamination cost} = \$500.00$$

$$\text{Total cost for decontamination} = \$1,770.00$$

**C. DISPOSAL OF WASH WATER**

1. Volume of water generated during decontamination.

$$\begin{aligned}\text{High pressure wash} &= 4.0 \text{ gallons per ft}^2 \\ 4,700 \text{ ft}^2 \times 4.0 \text{ gallons per ft}^2 &= 18,800 \text{ gallons} \\ \text{Vessel decontamination} &= 4,200 \text{ gallons} \\ \text{Equipment decontamination} &= 500 \text{ gallons} \\ \text{Total amount of waste water} &= 23,500 \text{ gallons}\end{aligned}$$

2. Water characterization.

1 sample every 5,000 gallons. Last sample taken from last flush.

Sampling crew charge = \$50.00 / water sample

5 water samples x \$50 /sample = \$250

23,500 gallons / 5,000 gallons/sample = 5 water samples

5 water samples (As, Cd, Cr, Pb, Hg) x \$140.78/sample = \$703.90

QA/QC samples (1 water) = \$140.78

3. Transportation of wash water.

23,500 gallons / 5,000gallons/ load = 5 loads

5 loads x \$326.00/load = \$1,630.00

4. Disposal of wash water.

23,500 gallons x \$0.15/gallon = \$3,525.00

**Total cost for disposal of wash water = \$6,249.68**

D. PERSONAL PROTECTIVE EQUIPMENT

1. \$45.00 per man x 6 man crew = \$270.00

E. CONFIRMATION SAMPLING

1. Concrete core soil samples: 1 sample every 1,000ft<sup>2</sup>

4,700 ft<sup>2</sup> / 1,000 ft<sup>2</sup>/sample = 5 samples

Sampling crew charge = \$500.00 / concrete core soil sample

5 concrete core soil samples x \$500.00/sample = \$2,500.00

2. Laboratory analysis

5 concrete core soil samples (As, Ba, Cd, Cr, Pb, Hg, Se, Ag, Sb, sulfate, pH)  
x \$367.04/sample = \$1,835.20

QA/QC samples (1 soil) = \$367.04

**Total cost for confirmation sampling = \$4,702.24**

F. EQUIPMENT LEASE

1. 1 Front end loader = \$125.00

2. 5 Steam cleaners: 5 x \$45.00 = \$225.00

**Total cost for equipment lease = \$350.00**

**G. CLOSURE CERTIFICATION**

**Lump Sum = \$5,000.00**

**SLAG STABILIZATION AREA TOTAL CLOSURE COSTS = \$44,261.72**

**Inflation adjustment for 2001 - 2.5 % = \$45,368.26**

**Inflation adjustment for 2002 - 2.5 % = \$46,502.47**

**Inflation adjustment for 2003 - 2.5 % = \$47,665.03**

**Inflation adjustment for 2004 - 2.5 % = \$48,856.66**

**Inflation adjustment for 2005 - 2.5 % = \$50,078.07**

**Inflation adjustment for 2006 - 2.5 % = \$51,330.03**

**TABLE 1B**

**SUPPLEMENTAL CLOSURE COST INFORMATION  
CONTAINMENT BUILDING**

**A. INVENTORY DISPOSAL**

**1. Maximum quantity of residual slag to be removed and disposed off-site.**

- a) Slag storage Area 1:  
 $100'l \times 25'w \times 10'h = 26,400ft^3$   
 $26,400ft^3 / 27 ft^3/yd^3 = 977.78 yd^3$   
 $977.78 yd^3 \times 1.2 tons/yd^3 = 1,333 tons$
- b) Slag storage Area 2:  
 $77'l \times 45'w \times 12'h = 41,580ft^3$   
 $29,200ft^3 / 27 ft^3/yd^3 = 1,081.48 yd^3$   
 $1081.48 yd^3 \times 1.3 tons/yd^3 = 2,000 tons$

Total residual slag to be removed and disposed = 3,333 tons.

**2. Unit cost to dispose of residual slag.**

Loading:  $\$2.00/ton \times 3,333 tons = \$6,666.00$   
Transportation:  $\$27.50/ton \times 3,333 tons = \$91,657.50$   
Disposal:  $\$150.00/ton \times 3,333 tons = \$499,950.00$

**Total disposal cost of residual slag = \$598,273.50**

**3. Maximum quantity of inventory to be removed for reuse.**

- a. Paste Storage Area 3:  
 $95'l \times 80'w \times 12'h = 91,200ft^3$   
 $91,200ft^3 / 27 ft^3/yd^3 = 3,377.8 yd^3$   
 $3,377.8 yd^3 \times 1.8 tons/yd^3 = 6,080 tons$
- b. Dry paste storage -
  - Area 4:  $50'l \times 50'h \times 12'h = 30,000 ft^3$   
 $30,000ft^3 / 27yd^3 = 1,111.11 yd^3$   
 $1,111.11 yd^3 \times 1.7 tons/yd^3 = 2,000.00 tons$
  - Area 5:  $100'l \times 25'h \times 12'h = 30,000 ft^3$   
 $30,000ft^3 / 27yd^3 = 1,111.11 yd^3$   
 $1,111.11 yd^3 \times 1.7 tons/yd^3 = 2,000.00 tons$
  - Area 6:  $100'l \times 25'h \times 12'h = 30,000 ft^3$   
 $30,000ft^3 / 27yd^3 = 1,111.11 yd^3$   
 $1,111.11 yd^3 \times 1.7 tons/yd^3 = 2,000.00 tons$

Total inventory to be removed = 12,080 tons

**Total capacity of the Containment Building = 7,614.81 yd<sup>3</sup> as listed in the RCRA Part A Permit Application, January 1999.**

4. Unit cost of inventory disposal.

Loading: \$2.00/ton x 12,080 tons = \$24,160.00

Transportation: \$ 18.00/ton x 12,080 tons = \$217,440.00

**Total cost of inventory disposal = \$241,600.00**

B. DECONTAMINATION OF CONTAINMENT BUILDING

1. Total surface area to be decontaminated:

Area 1 Floor: 100'l x 25'w = 2,500 ft<sup>2</sup>

Area 1 Walls: 150'l x 10'h = 1,500 ft<sup>2</sup>

Area 2 Floor: 70'l x 45'w = 3,150 ft<sup>2</sup>

Area 2 Walls: 125'l x 12'h = 1,500 ft<sup>2</sup>

Area 3 Floor: 95'l x 80'w = 7,600 ft<sup>2</sup>

Area 3 Walls: 200'l x 12'h = 2,400 ft<sup>2</sup>

Area 4 Floor: 50'l x 50'w = 2,500 ft<sup>2</sup>

Area 4 Walls: 100'l x 12'h = 1,200 ft<sup>2</sup>

Area 5 Floor: 100'l x 25'w = 2,500 ft<sup>2</sup>

Area 5 Walls: 100'l x 12'h = 1,200 ft<sup>2</sup>

Area 6 Floor: 100'l x 25'w = 2,500 ft<sup>2</sup>

Area 6 Walls: 100'l x 12'h = 1,200 ft<sup>2</sup>

29,750 ft<sup>2</sup> = Total surface area

Plus, 42,000 ft<sup>2</sup> of production area and 9,000 ft<sup>2</sup> trackways = 80,750 ft<sup>2</sup>

2. Unit cost of decontamination.

Crew = 1 supervisor (\$37.00/hour) and 20 laborers (\$18.00/hour each)

100ft<sup>2</sup>/hour x 20 laborers = 2,000ft<sup>2</sup>/hour

80,750ft<sup>2</sup> / 2,000ft<sup>2</sup>/hour = 41 hours

Plus 5 hour for equipment decontamination

46 hours x \$397.00/hour = \$18,262

Sweeper = 1 laborer (\$18.00) x 10 hours = \$180.00

**Total cost for decontamination = \$18,442.00**

C. DISPOSAL OF WASH WATER

1. Volume of water generated during decontamination.

High pressure wash = 4.0 gallons per ft<sup>2</sup>

80,750ft<sup>2</sup> x 4.0 gallons per ft<sup>2</sup> = 323,000 gallons

Equipment decontamination = 1,500 gallons

Total amount of waste water = 324,500 gallons

2. Water characterization.

Water samples: 1 sample every 5,000 gallons. Last sample from last flush.

Sampling crew charge = \$50.00 / water sample

65 water samples x \$50/sample = \$3,250

324,500 gallons / 5,000 gallons/sample = 65 water samples

65 water samples (As, Cd, Cr, Pb, Hg) x \$140.78/sample = \$9,150.70

QA/QC samples (3 water) = \$422.34

3. Transportation of wash water.

324,500 gallons / 5,000 gallons/load = 65 loads

65 loads x \$326.00/load = \$21,190.00

4. Disposal of wash water.

324,500 gallons x \$0.15/gallon = \$48,675.00

**Total cost for disposal of wash water = \$82,687.34**

D. PERSONAL PROTECTIVE EQUIPMENT

1. **\$45.00 per man x 21 man crew x 13 days = \$12,285.00**

E. CONFIRMATION SAMPLING

1. Concrete core soil samples: 1 sample every 900ft<sup>2</sup>

64,150ft<sup>2</sup> / 900ft<sup>2</sup>/sample = 71 samples

Paste Storage area: 1 sample every 400 ft<sup>2</sup>

7,600 ft<sup>2</sup> / 400 ft<sup>2</sup> = 19 samples

Sampling crew charge = \$650.00 / concrete core soil sample

90 concrete core soil samples x \$650.00/sample = \$58,500.00

2. Laboratory analysis.

90 concrete core soil samples (As, Ba, Cd, Cr, Pb, Hg, Se, Ag, Sb, sulfate, pH) x \$367.04/sample = \$33,033.60

QA/QC samples (4 soil) = \$1,468.16

**Total cost for confirmation sampling = \$93,001.76**

F. EQUIPMENT LEASE

1. 2 Front end loaders x \$125.00 each = \$250.00

2. 20 Steam Cleaners x \$180.00 each x 2 weeks = \$7,200.00

3. 1 Hoe Ram x \$400.00 each = \$400.00

4. 1 Sweeper truck x \$1,300.00 = \$1,300.00

**Total cost for equipment lease = \$9,150.00**

**G. CLOSURE CERTIFICATION**

**Lump Sum = \$9,000.00**

**CONTAINMENT BUILDING TOTAL CLOSURE COSTS = \$1,064,440.30**

**Inflation adjustment for 2001 – 2.5 % = \$1,091,051.31**

**Inflation adjustment for 2002 – 2.5 % = \$1,118,327.59**

**Inflation adjustment for 2003 – 2.5 % = \$1,146,285.78**

**Inflation adjustment for 2004 – 2.5 % = \$1,174,942.92**

**Inflation adjustment for 2005 – 2.5 % = \$1,204,316.50**

**Inflation adjustment for 2006 – 2.5 % = \$1,234,424.41**

## TABLE 1C

### SUPPLEMENTAL CLOSURE COST INFORMATION K069/D008 STORAGE AREA

#### A. INVENTORY DISPOSAL

1. Maximum quantity of inventory to be removed for reuse.

$$25'w \times 70'l = 1,750ft^2$$

$$4 \text{ rows with } 17 \text{ pallets/row, stacked } 2 \text{ pallets high} = 136 \text{ pallets}$$

$$136 \text{ pallets} \times 4 \text{ drums per pallet} = 544 \text{ drums}$$

$$544 \text{ drums} \times 55\text{-gallon capacity/drum} = 29,920 \text{ gallons} - \text{As listed in RCRA Part A Permit Application, January 1999.}$$

2. Unit cost for inventory removal.

$$\text{Loading: } \$0.45/\text{drum} \times 544 \text{ drums} = \$244.80$$

$$\text{Transportation: } \$15.00/\text{drum} \times 544 = \$8,160.00$$

$$\text{Total cost for inventory removal} = \$8,404.80$$

#### B. DECONTAMINATION OF K069/D008 STORAGE AREA

1. Total surface area to be decontaminated.

$$25'w \times 70'l = 1,750ft^2 \text{ of surface area to be decontaminated.}$$

2. Unit cost of decontamination.

$$\text{Crew} = 1 \text{ supervisor } (\$37/\text{hour}) \text{ and } 2 \text{ laborers } (\$18.00/\text{hour each})$$

$$300ft^2/\text{hour} \times 2 \text{ laborers} = 600ft^2/\text{hour}$$

$$1,750ft^2 / 600ft^2/\text{hour} = 2.9 \text{ hours}$$

$$\text{Equipment decontamination} = 1 \text{ hour}$$

$$4 \text{ hours} \times \$73.00 = \$292.00$$

$$\text{Total cost for decontamination} = \$ 292.00$$

#### C. DISPOSAL OF WASH WATER

1. Volume of water generated during decontamination.

$$\text{High pressure wash} = 3.0 \text{ gallons per } ft^2$$

$$1,750ft^2 \times 3.0 \text{ gallons per } ft^2 = 5,250 \text{ gallons}$$

$$\text{Equipment decontamination} = 500 \text{ gallons}$$

$$\text{Total amount of waste water} = 5,750 \text{ gallons}$$



2. Water characterization.

Water samples: 1 sample every 5,000 gallons. Last sample from last flush.

Sampling crew charge = \$50.00 / water sample

2 water samples x \$50/sample = \$100

5,750 gallons / 5,000 gallons/sample = 2 water samples

2 water samples (As, Cd, Cr, Pb, Hg) x \$140.78/sample = \$281.56

QA/QC Samples (1 water) = \$140.78

3. Transportation of wash water.

5,750 gallons / 5,000 gallons/load = 2 loads

2 loads x \$326/gallon = \$652.00

4. Disposal of wash water.

5,750 gallons x \$0.15/gallon = \$862.50

**Total cost for disposal of wash water = \$ 2,036.84**

D. PERSONAL PROTECTIVE EQUIPMENT

1. \$45.00 per man x 3 man crew = \$135.00

E. CONFIRMATION SAMPLING

1. Concrete core soil samples: 1 sample every 1,000ft<sup>2</sup>

1,750ft<sup>2</sup> / 1,000ft<sup>2</sup>/sample = 2 samples

Sampling crew charge = \$500.00 / concrete core soil sample

2 concrete core soil samples x \$500.00/sample = \$1,000.00

2. Laboratory analysis.

2 concrete core soil samples (As, Ba, Cd, Cr, Pb, Hg, Se, Ag, Sb, sulfate, pH)

x \$367.04/sample = \$734.08

QA/QC samples (1 soil) = \$367.04

**Total cost for confirmation sampling = \$2,101.12**

F. EQUIPMENT LEASE

1. 1 Fork lift = \$75.00

2. 2 Steam cleaners: 2 x \$45.00 = \$90.00

**Equipment lease total = \$165.00**

**G. CLOSURE CERTIFICATION**

**Lump sum = \$4,000.00**

**K069/D008 STORAGE AREA TOTAL CLOSURE COSTS = \$17,134.76**

**Inflation adjustment for 2001 – 2.5 % = \$17,563.13**

**Inflation adjustment for 2002 – 2.5 % = \$18,002.21**

**Inflation adjustment for 2003 – 2.5 % = \$18,452.26**

**Inflation adjustment for 2004 – 2.5 % = \$18,913.57**

**Inflation adjustment for 2005 – 2.5 % = \$19,386.41**

**Inflation adjustment for 2006 – 2.5 % = \$19,871.07**

## TABLE 1D

### SUPPLEMENTAL CLOSURE COST INFORMATION TRUCK/TRAILER STORAGE AREA

#### A. INVENTORY DISPOSAL

1. Maximum quantity of inventory to be removed for reuse.

85,000 batteries on pallets stored on trucks or trailers.

1 battery = 1 gallon. Total capacity = **85,000 gallons – As listed in RCRA Part A Permit Application, January 1999.**

2. Unit cost for inventory removal.

Loading batteries: 85,000 batteries x \$0.01/battery = \$850.00

Transportation: 85,000 batteries x \$0.42/battery = \$35,700.00

**Total cost for inventory removal = \$36,550.00**

#### B. DECONTAMINATION OF TRUCK/TRAILER STORAGE AREA

1. Total surface area to be decontaminated.

120'w x 120'l = 14,400ft<sup>2</sup> of surface area to be decontaminated.

2. Unit cost of decontamination.

Crew = 1 supervisor (\$37/hour) and 4 laborers (\$18.00/hour each)

600ft<sup>2</sup>/hour x 4 laborers = 2,400ft<sup>2</sup>/hour

14,400ft<sup>2</sup> / 2,400ft<sup>2</sup>/hour = 6 hours

6 hours x \$109.00 = \$654.00

**Total cost for decontamination = \$ 654.00**

#### C. DISPOSAL OF WASH WATER

1. Volume of water generated during decontamination.

High pressure wash = 1.2 gallons per ft<sup>2</sup>

14,400ft<sup>2</sup> x 1.2 gallons per ft<sup>2</sup> = 17,280 gallons

2. Water samples: 1 sample every 5,000 gallons. Last sample from last flush.

Sampling crew charge = \$50.00 / water sample

4 water samples x \$50/sample = \$200

17,280 gallons / 5,000 gallons/sample = 4 water samples

4 water samples (As, Cd, Cr, Pb, Hg) x \$140.78/sample = \$563.12

QA/QC samples (1 water) = \$140.78

3. Transportation of wash water.

17,280 gallons / 5,000 gallons/load = 4 loads

4 loads x \$326.00 = \$1,304.00

4. Disposal of wash water.

17,280 gallons x \$0.15/gallon = \$2,592.00

**Total cost for disposal of wash water = \$ 4,799.90**

D. PERSONAL PROTECTIVE EQUIPMENT

1. **\$45.00 per man x 5 man crew = \$225.00**

E. CONFIRMATION SAMPLING

1. Concrete core soil samples: 1 sample every 1,000ft<sup>2</sup>

14,400ft<sup>2</sup> / 1,000ft<sup>2</sup>/sample = 15 samples

Sampling crew charge = \$500.00 / concrete core soil sample

15 concrete core soil samples x \$500.00/sample = \$7,500.00

2. Laboratory analysis.

15 concrete core soil samples (As, Ba, Cd, Cr, Pb, Hg, Se, Ag, Sb, sulfate, pH) x  
\$367.04/sample = \$5,505.60

QA/QC samples (2 soil) = \$734.08

**Total cost for confirmation sampling = \$13,739.68**

F. EQUIPMENT LEASE

**4 Steam cleaners: 4 x \$45.00 = \$180.00**

G. CLOSURE CERTIFICATION

**Lump Sum = \$3,500.00**

**TRUCK/TRAILER STORAGE AREA TOTAL CLOSURE COSTS = \$59,648.58**

**Inflation adjustment for 2001 – 2.5% = \$61,139.79**

**Inflation adjustment for 2002 – 2.5% = \$62,668.29**

**Inflation adjustment for 2003 – 2.5% = \$64,235.00**

**Inflation adjustment for 2004 – 2.5% = \$65,840.87**

**Inflation adjustment for 2005 – 2.5% = \$67,486.89**

**Inflation adjustment for 2006 – 2.5% = \$69,174.07**

TABLE 1E

**SUPPLEMENTAL CLOSURE COST INFORMATION  
WHOLE BATTERY STORAGE AREA**

**A. INVENTORY DISPOSAL**

1. Maximum quantity of inventory to be removed for reuse.

$$75'w \times 160'l = 12,000ft^2$$

$$30 \text{ rows} \times 18 \text{ pallets per row} \times 3 \text{ pallets high} = 1,620 \text{ pallets}$$

$$1,620 \text{ pallets} \times 75 \text{ batteries per pallet} = 121,500 \text{ batteries}$$

1 battery = 1 gallon. Total capacity = **121,500 gallons** – As listed in RCRA Part A Permit Application, January 1999.

2. Unit cost for inventory removal.

$$\text{Loading: } 121,500 \text{ batteries} \times \$0.05/\text{battery} = \$6,075$$

$$\text{Transportation: } 121,500 \text{ batteries} \times \$0.42/\text{battery} = \$51,030$$

**Total cost for inventory removal = \$57,105**

**B. DECONTAMINATION OF WHOLE BATTERY STORAGE AREA**

1. Total surface area to be decontaminated.

$$750'w \times 160'l = 12,000ft^2 \text{ of surface area to be decontaminated.}$$

2. Unit cost of decontamination.

$$\text{Crew} = 1 \text{ supervisor } (\$37/\text{hour}) \text{ and } 4 \text{ laborers } (\$18.00/\text{hour each})$$

$$600ft^2/\text{hour} \times 3 \text{ laborers} = 1,800ft^2/\text{hour}$$

$$12,000ft^2 / 1,800ft^2/\text{hour} = 7 \text{ hours}$$

$$\text{Equipment decontamination} = 1 \text{ hour}$$

$$8 \text{ hours} \times \$91.00 = \$728$$

**Total cost for decontamination = \$ 728.00**

**C. DISPOSAL OF WASH WATER**

1. Volume of water generated during decontamination.

$$\text{High pressure wash} = 1.2 \text{ gallons per } ft^2$$

$$12,000ft^2 \times 1.2 \text{ gallons per } ft^2 = 14,400 \text{ gallons}$$

$$\text{Equipment decontamination} = 500 \text{ gallons}$$

$$\text{Total amount of waste water} = 14,900 \text{ gallons}$$

2. Water samples: 1 sample every 5,000 gallons. Last sample from last flush.

Sampling crew charge = \$50 / water sample

3 water samples x \$50/sample = \$150.00

14,900 gallons / 5,000 gallons/sample = 3 water samples

3 water samples (As, Cd, Cr, Pb, Hg) x \$140.78/sample = \$422.34

QA/QC samples (1 water) = \$140.78

3. Transportation of wash water.

14,900 gallons / 5,000 gallons/load = 3 loads

3 loads x \$326.00 = \$978.00

4. Disposal of wash water.

14,900 gallons x \$0.15/gallon = \$2,235.00

**Total cost for disposal of wash water = \$3,926.12**

D. PERSONAL PROTECTIVE EQUIPMENT

1. \$45.00 per man x 4 man crew = \$180.00

E. CONFIRMATION SAMPLING

1. Concrete core soil samples: 1 sample every 1,000ft<sup>2</sup>

12,000ft<sup>2</sup> / 1,000ft<sup>2</sup>/sample = 12 samples

Sampling crew charge = \$500.00 / concrete core soil sample

12 concrete core soil samples x \$500.00/sample = \$6,000.00

2. Laboratory analysis.

12 concrete core soil samples (As, Ba, Cd, Cr, Pb, Hg, Se, Ag, Sb, sulfate, pH) x  
\$367.04/sample = \$4,404.48

QA/QC samples (2 soil) = \$734.08

**Total cost for confirmation sampling = \$11,138.56**

F. EQUIPMENT LEASE

1. 1 Fork lift = \$75.00

2. 3 Steam cleaners: 3 x \$45.00 = \$135.00

**Equipment lease total = \$210.00**

**G. CLOSURE CERTIFICATION**

**Lump sum = \$3,500.00**

**WHOLE BATTERY STORAGE AREA TOTAL CLOSURE COSTS = \$76,787.68**

**Inflation adjustment for 2001 – 2.5% = \$78,707.37**

**Inflation adjustment for 2002 – 2.5% = \$80,675.06**

**Inflation adjustment for 2003 – 2.5% = \$82,691.93**

**Inflation adjustment for 2004 – 2.5% = \$84,759.23**

**Inflation adjustment for 2005 – 2.5% = \$86,878.21**

**Inflation adjustment for 2006 – 2.5% = \$89,050.17**



TABLE 2

## POST CLOSURE CARE COST ESTIMATE

Description	Units	Unit Cost	Total Yearly Cost
<b>TWO CLOSED WASTE PILES</b>			
1 Cover Maintenance			
a. Top Soil Maintenance (5 acres)	5	\$100.00	\$500.00
b. Fertilizing and Reseeding (5 acres)	5	\$60.00	\$300.00
c. Grass Cutting and Upkeep (\$40.00/acre x 4 events)	5	\$160.00	\$800.00
d. Engineer's Inspection	1	\$300.00	\$300.00
<b>Subtotal</b>			<b>\$1,900.00</b>
<b>TOTAL (10 years of Post-Closure Monitoring)</b>	<b>10</b>	<b>\$1,900.00</b>	<b>\$19,000.00</b>
2 Groundwater Monitoring (7 Wells)			
a. Purging and Sampling (Twice a Year at \$50.00 per well)	7	\$100.00	\$700.00
b. Laboratory Analysis (Twice a Year at \$110.00 per well)	8*	\$220.00	\$1,760.00
c. Semi-annual Report	2	\$500.00	\$1,000.00
<b>Subtotal</b>			<b>\$3,460.00</b>
<b>TOTAL (10 years of Post-Closure Monitoring)</b>	<b>10</b>	<b>\$3,460.00</b>	<b>\$34,600.00</b>
3 LDEQ Annual Monitoring and Maintenance Fee	7	\$250.00	\$1,750.00
<b>TOTAL (10 years of Post-Closure Monitoring)</b>	<b>10</b>	<b>\$1,750.00</b>	<b>\$17,500.00</b>
<b>POST-CLOSURE COSTS - CLOSED WASTE PILES</b>			<b>\$71,100.00</b>
Plus 10% Contingency			\$7,110.00
<b>TOTAL POST-CLOSURE COSTS</b>			<b>\$78,210.00</b>

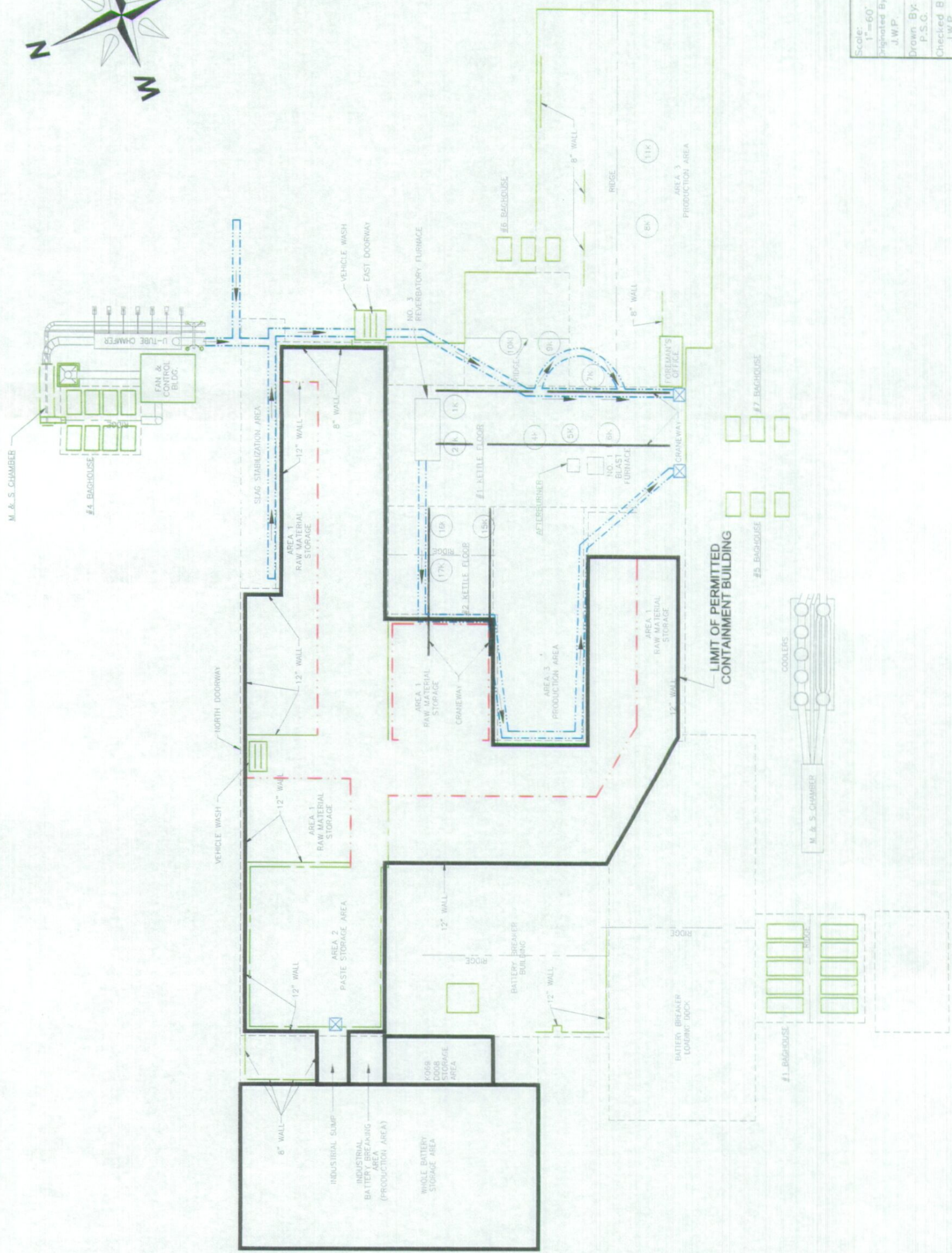
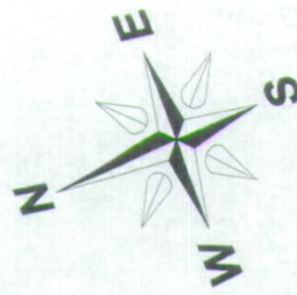
\* Cost includes analyzing 1 duplicate sample.

Inflation adjusted for 2001 (2.5%)	\$80,165.25
Inflation adjusted for 2002 (2.5%)	\$82,169.38
Inflation adjusted for 2003 (2.5%)	\$84,223.62
Inflation adjusted for 2004 (2.5%)	\$86,329.21
Inflation adjusted for 2005 (2.5%)	\$88,487.44
Inflation adjusted for 2006 (2.5%)	\$90,699.62

## FIGURES





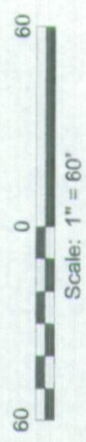


**Legend**

- Area 1 Raw Material Storage Areas
- Area 2 Paste Storage Area
- Area 3 Production Area
- Water Collection Sump
- Floor Drain
- Water Flow

**Notes:**

1. Base map comprised from Exide Corporation drawing titled "Containment Building" for the Hazardous Waste Containment Building Certification drawing no. B24-810-01 drawn by C-K Associates, Inc. dated 11/03/99.
2. Area 2 sump location from Providence Engineering as-built dated November 19, 2003.



**EXIDE TECHNOLOGIES**  
BATON ROUGE, LOUISIANA

CONTAINMENT BUILDING MAP	
Scale: 1"=60'	Project No. 2003-1058-03
Designed By: J.W.P.	Project No. 2003-1058-03
Drawn By: P.S.C.	Project No. 2003-1058-03
Checked By: J.W.P.	Project No. 2003-1058-03
Project Mgr: P.G.S.	Project No. 2003-1058-03
Dwg No. 2003-1058-03-09	Project No. 2003-1058-03
FIGURE: 2	



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**RESPONSE  
ATTACHMENT A13**

# **APPENDIX 13**

## **TRAINING MANUAL**

# **TRAINING MANUAL**

**EXIDE TECHNOLOGIES  
BATON ROUGE SMELTER**

**2400 BROOKLAWN DRIVE  
BATON ROUGE, LOUISIANA**

Revision 4 – October 2006

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## **1.0 INTRODUCTION**

### **1.1 Policy**

The Exide Technologies, Baton Rouge smelter is located in Baton Rouge, East Baton Rouge Parish, Louisiana. This facility is a secondary lead smelter and refinery that recycles spent lead-acid batteries and inorganic lead-bearing wastes into product lead.

Exide is committed to providing a safe and healthy work place for all of the employees, contractors and vendors at the Baton Rouge smelter. Proper training is essential for accomplishing this goal.

### **1.2 Scope**

This Training Manual outlines the training requirements of Exide Technologies Health and Safety and Environmental Programs. The purpose of this manual is to document the procedures that are used to train all of the employees at the Baton Rouge smelter in all of the required elements of the Health and Safety, and Environmental Programs.

## **2.0 OBJECTIVES**

The objectives of this manual include outlining a Training Program that:

- Promotes the health and safety of Exide employees.
- Provides for safe working conditions at the Baton Rouge smelter.
- Maintains compliance with all applicable environmental, health and safety regulations.
- Satisfies the training requirements of Exide's environmental, health and safety programs.
- Documents that the training has been completed.

Successfully meeting the objectives of this training program require cooperation of all Exide employees. This manual describes the types of training, the training frequency and the documentation necessary to comply with Exide requirements and regulatory considerations. Classroom training is conducted by department supervisors and the Environmental, Health and Safety Department (E,H&S) during weekly safety meetings. Table 1 presents a schedule for the weekly safety meetings. On the job training is typically task or job specific and is conducted by a supervisor or senior employee that is familiar with the job.

## **2.1 Regulatory Considerations**

There are a number of legislative acts, government agencies, and organizations that impose requirements, restrictions, or guidelines for activities conducted at the facility. The major agencies and the associated regulations that affect the Baton Rouge smelter include the following:

- Occupational Safety and Health Agency (OSHA) – 29CFR 1910
- Louisiana Department of Environmental Quality (LDEQ) – LAC 33:III, LAC33.V, LAC33.VII, and LAC33.IX.
- Environmental Protection Agency (EPA) – 40CFR 190-299
- Department of Transportation (DOT) – 29CFR 160-175

## **3.0 TRAINING PROGRAM**

Exide has developed a comprehensive Health and Safety Program for the Baton Rouge smelter. The program presents the guidelines for protection of the safety and health of the employees at the Exide Baton Rouge facility. The overall Health and Safety Program is divided into component programs, such as lockout tagout and confined space entry. The Health and Safety Program is administered by Exide's EH&S Department.

This manual presents the training requirements specified in the Health and Safety program, as well as all other required training. Sections 3.1 through 3.13 outline the training programs that are in place at the Baton Rouge smelter. Appendix A presents an outline of the required elements of each of the training programs.

Written job descriptions have been developed for each position at the Baton Rouge smelter. The job descriptions list training requirements that the employees must complete. Appendix B presents a copy of these job descriptions.

New hires at the Baton Rouge smelter receive initial training on all required topics prior to beginning work.

### **3.1 Medical Surveillance Program**

The Medical Surveillance Program at the Baton Rouge smelter is designed to protect the health of employees that may be exposed to elevated levels of heavy metals, in particular lead. Key elements of the Medical Surveillance Program include blood lead and air lead monitoring, medical examinations, and medical removal protection. The Medical Surveillance Program also includes drug screening and new hire physical evaluation.

Training on this program includes permissible exposure limits, types and frequency of exposure monitoring and medical removal protection. Part of the medical surveillance program includes lead exposure training. This training emphasizes personal hygiene and proper respirator use to

reduce exposure. Training is conducted at least once per year, with additional training administered as needed.

### **3.2 Lockout Tagout Program**

The Baton Rouge Lockout Tagout Program describes the procedures to be followed when working on any type of equipment or machinery where the unexpected energizing, startup or release of energy could occur and cause injury. The program was developed to be job and equipment specific, so that employees know the proper lockout tagout procedures for the machinery or equipment in their work area. The lockout tagout program is reviewed annually by EHS Department with employee input and changes to the program are made as needed based on the Annual Review.

Refresher training is conducted annually for affected employees. Lockout tagout training is also conducted whenever there is a change in employee job assignments, when employees are working near equipment they have not been trained on, a change in equipment, machinery or process, or where energy control procedures have changed. Training covers lockout tagout procedures for specific equipment and job descriptions. Periodic audits of jobs that require lockout tagout are conducted.

### **3.3 Confined Space Entry Program**

The Confined Space Entry Program was developed to provide procedures for the safe work of personnel required to enter confined spaces. A confined space is any area large enough that an employee can enter and perform work, but has limited means of entry or exit, and is not designed for continuous occupancy. The program lists all permit required confined spaces at the Baton Rouge smelter. The program describes permitting, entry procedures, the duties and responsibilities of the entrants and attendants, communication procedures and rescue procedures.

Initial employee training is conducted prior to beginning any confined space entry. Follow-up training is conducted at least annually. Training includes a review of the permitting process, atmospheric testing procedures, calibration of the monitoring equipment, and duties of each person on the confined space entry team.

### **3.4 Hearing Conservation Program**

The Hearing Conservation Program describes noise monitoring of work area, engineering and administrative controls, and hearing conservation measures. The goal of the program is to eliminate hearing loss due to workplace noise exposure.

Affected employees are trained annually in the effects of noise, the purpose, advantages and disadvantages of various types of hearing protection, and the purpose of audiometric testing. The training emphasizes the selection, fit and care of hearing protection and includes a review of the hearing conservation areas at the smelter.

### **3.5 Respiratory Protection Program**

Exide has an established Respiratory Protection Program in place at the Baton Rouge smelter. This program is designed to protect employees from air contaminants in the workplace. The program describes the procedures for medical evaluation of employee's ability to wear a respirator, the fit testing procedures, appropriate selection of a respirator, and use, cleaning and storage of respirators. Exide's respiratory protection program is also designed to protect contractors and vendors.

Training includes instruction on respirator fit and how to check the respirator's seal. The training provides employees an opportunity to handle the respirator, wear it, adjust it and become familiar with the respirator in a normal breathing air atmosphere. The specific respiratory hazards of each work area are discussed, along with selection methodology and limitation of particular types of respirators. The training instructs the employees in the proper way to don a respirator, fit testing, and proper wear. Respirator maintenance, storage and emergency handling situations are also discussed. Classroom instruction is conducted at least once per year, with on-the-job training, fit testing and personnel instruction being administered as required.

### **3.6 Powered Industrial Truck Safety**

Powered industrial trucks (fork lifts) are used by nearly every department at the Baton Rouge smelter. Powered material handling training is conducted to meet the OSHA 29 CFR 1910.178 and Exide safety requirements. This training consists of classroom instruction and hands-on operation. Operators are trained to understand the basic operations of powered industrial trucks, including pre-start inspections, fueling, stability, visibility, handling, operating environment, obstructions, obstacles, and breakdowns. Possible hazards that may be encountered on the job are discussed. Operators are trained to recognize unsafe conditions and how to react to them when they occur.

Each new employee receives powered material handling safety training. Refresher training is conducted once every three- (3) years.

### **3.7 Hazard Communication**

Training in hazard communications includes topics such as right-to-know, material safety data sheets (MSDS), labeling and placarding, chemical handling and chemical hazards. This training is conducted at least once per year. Training includes a review of the material safety data sheet binders, a discussion of specific chemicals used by department and job descriptions and required labels for trucks, batteries and containers.

### **3.8 HAZWOPER Training**

As specified by OSHA 29CFR1910.120, certain employees conducting operations at treatment storage and disposal facilities must have training in hazardous waste operations. The training is designed to help employees perform their assigned duties and functions in a safe and healthful manner. This training is specific to job descriptions and work practices, and includes proper personal protective equipment and hazardous material handling procedures.

Every employee is given 8-hours of refresher training annually.

### **3.9 Baton Rouge Contingency Plan**

Exide has prepared an Emergency Contingency Plan that lists emergency procedures and the emergency response organization. This plan was prepared to minimize injury and property damage in the event of a plant emergency or natural disaster. Training requirements include the plant alarm system, assembly areas, emergency response organization, emergency phone lists, fire protection equipment and evacuation routes.

Classroom training on the Emergency Contingency Plan is conducted annually. Announced and unannounced emergency drills are conducted periodically.

### **3.10 Environmental Regulations**

Training on basic environmental regulations that affect the Baton Rouge smelter is conducted for all employees. This training includes a brief discussion of regulatory agencies and programs that affect operations at the smelter. The training describes specific requirements for various job descriptions and tasks such as inspection schedules, documentation and engineering controls.

Classroom instruction on environmental regulations is conducted annually, with on-the-job training being administered as required.

### **3.11 Spill Response**

The Baton Rouge smelter has a Spill Prevention Control and Countermeasure Plan (SPCC) as required by LDEQ regulations. The components of the SPCC Plan are included in the RCRA Contingency Plan and Emergency Response Plan. The spill response training covers spill prevention and control measures in affect at the site. Also the training discusses what to do in the event of a spill.

Spill response training is conducted at least once per year, typically in conjunction with environmental regulations training.

### **3.12 Work Practice Training Program**

This program outlines methods and practices that when followed will reduce accidents and lead exposure. Training includes molten metal handling, chemical handling, drossing, and refining. Exide's safety consultant, Mr. Mel Cassidy, CIH, completed a video exposure monitoring study of various workstations at the smelter. The video exposure monitoring has been incorporated into a Work Practice Training Program. Also part of the Work Practice training, the Baton Rouge smelter developed Job Task Analysis forms for various jobs performed by smelter employees. This program will result in reductions of air and blood lead levels in workers. Training is conducted annually and is job and task specific.

### **3.13 DOT Hazardous Material Training**

The Department of Transportation (DOT) requires training for employees involved in transportation of hazardous materials. Exide has a training program in place for employees who:

- load and unload hazardous materials;
- mark containers used in transporting hazardous materials;
- prepare hazardous materials for transporting;
- prepare shipping papers;
- are responsible for the safe transporting of hazardous materials;
- operate a vehicle transporting hazardous materials.

The training covers general awareness of Hazardous Material Regulations and is also function specific, describing specific requirements for each task (loading, labeling, etc.). The training is conducted initially when an employee begins working in a job that requires DOT training. Refresher training is conducted periodically.

### **3.14 Other Required Training**

Other training that is required for employees at the Baton Rouge smelter include sexual harassment, blood borne pathogens, heat stress, fire extinguisher use and incipient fire control, fall protection, slip trip and fall hazard avoidance, and proper lifting techniques and back protection. These topics are discussed at least once per year in the safety meetings.

## **4.0 RECORD KEEPING**

Each employee that completes a training session signs a Training Record sheet. These sign-off sheets are used to document the training. Training records is kept on site for all current employees of the Baton Rouge smelter. The records are retained as required by Exide's Record Retention Policy. For current employees, records are retained until facility closure. Training records for former employees are kept at least 3 years from the date the employee last worked at the facility.

## TABLES

**TABLE 1  
EXIDE BATON ROUGE  
TRAINING SCHEDULE**

<b>Month</b>	
<b>January 1 - 15</b>	<b>January 16 - 31</b>
Respiratory Protection	Personel Protective Equipment
<b>February 1 - 15</b>	<b>February 16 - 28</b>
Lock-out Tag Out	Confined Space Entry
<b>March 1 - 15</b>	<b>March 16 - 31</b>
Right to Know	OSHA Lead Standard
<b>April 1 - 15</b>	<b>April 16 - 30</b>
Forklift Training	Housekeeping
<b>May 1 - 15</b>	<b>May 16 - 31</b>
Heat Stress	Medical Emergencies - First Response
<b>June 1 - 15</b>	<b>June 16 - 30</b>
Blood Borne Pathogens	Sexual Harrassment
<b>July 1 - 15</b>	<b>July 16 - 31</b>
Molten Metal Safety	Machine Guarding
<b>August 1 - 15</b>	<b>August 16 - 31</b>
Crane and Hoist Safety	Fall Protection and Working at Heights
<b>September 1 -15</b>	<b>September 16 - 30</b>
Proper Lifting	Preventing Slips Trips and Falls
<b>October 1 - 15</b>	<b>October 16 - 31</b>
Environmental Regulations and Spill Response and Control	Emergency Contingency Plan
<b>November 1 - 15</b>	<b>November 16 - 30</b>
Communicating Safety	Hazwoper
<b>December 1 - 15</b>	<b>December 16 - 31</b>
Hearing Conservation	Fire Extinguisher Training

This is a typical training schedule. At a minimum, each topic will be presented annually. The actual order of presentation may vary based on activities at the facility.



## **APPENDIX A**

### **TRAINING PROGRAMS REQUIRED ELEMENTS OUTLINE**

## **TRAINING PROGRAM REQUIRED ELEMENTS OUTLINE**

### **Medical Surveillance Program**

#### **Required Elements of the Program**

- 1 Annual training, with documentation.
- 2 Annual review of the program.

#### **Training Program Outline**

- 1 Pre-employment physical and annual examinations.
- 2 OSHA lead, cadmium and arsenic standards.
- 3 Blood and air lead monitoring.
- 4 Medical removal protection.
- 5 Lead exposure training (personal hygiene and respirator use).

### **Lockout Tagout Program**

#### **Required Elements of the Program**

- 1 Annual training, with documentation.
- 2 Annual review of the program.

#### **Training Program Outline**

- 1 When is lockout tagout required.
- 2 Types of stored energy (electric, mechanical, hydraulic, pneumatic, chemical, thermal, or other energy).
- 3 General lockout tagout procedures.
- 4 Lockout tagout procedures for specific equipment in the plant.
- 5 Procedures for outside contractors.

### **Confined Space Entry Program**

#### **Required Elements of the Program**

- 1 List of entry supervisors by job title.
- 2 List of confined spaces.
- 3 Signs for all confined spaces.
- 4 Annual training with documentation.
- 5 External and internal rescue service and procedures for summoning service and prevention of unauthorized attempted rescues.
- 6 Annual review of the program.

#### **Training Program Outline**

- 1 Definition of a Confined Space.
- 2 Identification of Confined Spaces in the smelter.
- 3 Confined Space Entry Permits.
- 4 Pre-entry monitoring and equipment calibration.
- 5 Energy isolation and lockout tagout.
- 6 Job duties for Entrants, Attendants, and Supervisors.
- 7 Ventilation and respiratory protection requirements.

## **TRAINING PROGRAM REQUIRED ELEMENTS OUTLINE**

### **8 Communications.**

#### **Hearing Conservation Program**

##### **Required Elements of the Program**

- 1 Conduct on-site noise monitoring using personal noise dosimetry on a periodic basis.
- 2 Post warning signs in high noise areas.
- 3 Audiometric testing, baseline and annual.
- 4 Annual training, with documentation.
- 5 Annual review of the program.

##### **Training Program Outline**

- 1 Identifying hearing protection areas.
- 2 Types of hearing protection.
- 3 Proper fit and use of hearing protection.

#### **Respiratory Protection Program**

##### **Required Elements of the Program**

- 1 Annual training, with documentation.
- 2 Annual review of the program.

##### **Training Program Outline**

- 1 Required areas for respirator use.
- 2 Respirator selection and limitations.
- 3 Fit testing requirements and procedures.
- 4 Proper use.
- 5 Respirator care and maintenance.

#### **Powered Industrial Truck Safety Program**

##### **Required Elements of the Program**

- 1 Initial training, both classroom and driving with certification.
- 2 Refresher training every three years.

##### **Training Program Outline**

- 1 Pre-operation inspections.
- 2 Operating procedures.
- 3 Safety Rules.
- 4 Preventive Maintenance.

#### **Hazard Communication Program**

##### **Required Elements of the Program**

- 1 Annual training, with certification.
- 2 Annual review of the program.

## **TRAINING PROGRAM REQUIRED ELEMENTS OUTLINE**

### **Training Program Outline**

- 1 Chemical inventory.
- 2 MSDS binders.
- 3 Physical and health hazards of chemical used in specific work areas.
- 4 Proper labeling, handling and storage of chemicals.

### **Baton Rouge Contingency Plan**

#### **Required Elements of the Program**

- 1 Annual training, with documentation.
- 2 Annual review of the program.
- 3 Update plan when there is a change in facility operations, personnel, emergency equipment or emergency procedures.

#### **Training Program Outline**

- 1 Contingency Plan officers and duties.
- 2 Alarm system.
- 3 Emergency response procedures.
- 4 Fire drills.
- 5 Assembly areas.

### **Spill Response and Environmental Regulations**

#### **Required Elements of the Program**

- 1 Annual training, with documentation.
- 2 Annual review of the SPCC plan.

#### **Training Program Outline**

- 1 Spill prevention and control measure.
- 2 Regulatory agencies and programs that affect operations at the smelter.
- 3 Job and task specific environmental requirements.

### **Work Practice Training Program**

#### **Required Elements of the Program**

- 1 Annual training, with documentation.
- 2 Periodic updates of the JTA system.

#### **Training Program Outline**

- 1 Job Task Analysis.
- 2 Video exposure monitoring.
- 3 Safety procedures for molten metal.
- 4 Chemical handling procedures.
- 5 Job specific safety procedures.

## **TRAINING PROGRAM REQUIRED ELEMENTS OUTLINE**

### **DOT Hazardous Material Training**

#### **Required Elements of the Program**

- 1 Annual training, with documentation.

#### **Training Program Outline**

- 1 Loading and unloading hazardous materials.
- 2 Proper labeling, packaging and shipping rules.
- 3 Shipping papers (bill of lading, manifests).

### **HAZWOPER 8-Hour Training**

#### **Required Elements of the Program**

- 1 Annual training, with documentation.

#### **Coarse Outline**

- 1 Exide's Health and Safety Program: Required PPE, Respiratory Protection, Site Characterization, Lock-Out Tag-Out Program, Confined Space Entry Program and Hearing Conservation Program.
- 2 HazCom: Labeling, Signs, MSDS System, Site Specific Chemical Hazards, Biological Hazards, Physical Hazards and Molten Material Handling.
- 3 Medical Surveillance Program: Blood Lead, Arsenic and Cadmium, Air Lead, Video Exposure Monitoring and Exposure Limits.
- 4 Decontamination and Hygiene Program: Personal Hygiene, Vehicle Decontamination, Water Treatment, Fugitive Dust Control Measures (Road Sweeper, Area Cleanup).
- 5 Material Handling Program: Drum Handling, Chemical Handling, Upkeep of the Chemical Warehouse and Phosphorus Building, Lead Handling, Handling and Emergency Response for Compressed Gas Cylinders, Oxygen Storage Tanks and Fuel Tanks, Housekeeping.
- 6 Emergency Response: Baton Rouge Contingency Plan, Alarm System, First Responder Training Fire Extinguisher Use/Location and Utility Disconnects.
- 7 Unit Specific Hazards: Production, Casting, Battery Breaker, Slag Crusher, Yard, Baghouse, Water Treatment, Shop.
- 8 Review and Test.

**APPENDIX B**

**JOB DESCRIPTIONS**

## **JOB DESCRIPTION**

**JOB TITLE:** REFINERY SUPERVISOR

**FUNCTION:** SUPERVISE THE REFINERY OPERATIONS.

**TECHNICAL REQUIREMENTS:** MUST HAVE SEVERAL YEARS EXPERIENCE AS A REFINERY OPERATOR, KNOW REFINERY OPERATIONS COMPLETELY AND HAVE A HIGH DEGREE OF MECHANICAL APTITUDE.

**TRAINING:** TRAINING WILL INCLUDE, BASIC ENVIRONMENTAL REGULATIONS, CHEMICAL HANDLING, CONTINGENCY PLAN, LEAD SMELTING AND RECYCLING, PROPER CLEANUP PROCEDURES, AND ALL EXIDE SAFETY PROCEDURES INCLUDING LOCKOUT TAG-OUT, CONFINED SPACE ENTRY, RIGHT-TO-KNOW, BLOOD LEAD MONITORING, RESPIRATORY PROTECTION, AND MSDS.

**DUTIES AND RESPONSIBILITIES:**

- Understand and oversee all phases of refinery operations.
- Must direct and supervise all maintenance work incidental to the furnace operations.
- Order and maintain an inventory of all chemicals needed for the refinery operations.
- Coordinate with Raw Materials Manager to ensure that the refinery produces all of the required lead products requested by customers.
- Maintain good housekeeping in the refinery area, the chemical warehouse and the lead storage warehouse.
- Train, instruct and supervise new refinery operators.
- Must follow all of Exide's safety rules and practices, and be sure that all of the refinery operators and crews are following safety practices.

## JOB DESCRIPTION

JOB TITLE: REFINERY OPERATOR

FUNCTION: PERFORM ALL TASKS ASSOCIATE WITH THE REFINERY OPERATIONS.

TECHNICAL REQUIREMENTS: MUST HAVE SEVERAL YEARS EXPERIENCE IN THE REFINING OF LEAD AND LEAD ALLOYS, MUST BE KNOWLEDGEABLE OF CHEMICAL ADDITIVES REQUIRED TO PRODUCE QUALITY LEAD AND LEAD ALLOY.

TRAINING: TRAINING WILL INCLUDE, BASIC ENVIRONMENTAL REGULATIONS, CHEMICAL HANDLING, CONTINGENCY PLAN, LEAD SMELTING AND RECYCLING, PROPER CLEANUP PROCEDURES, AND ALL EXIDE SAFETY PROCEDURES INCLUDING LOCKOUT TAG-OUT, CONFINED SPACE ENTRY, RIGHT-TO-KNOW, BLOOD LEAD MONITORING, RESPIRATORY PROTECTION, AND MSDS.

### DUTIES AND RESPONSIBILITIES:

- Conduct and supervise the refinery and casting operations.
- Coordinate with the laboratory staff to ensure proper chemical analysis of refinery produces.
- Conduct and supervise housekeeping in the refinery area, the chemical warehouse and the lead storage warehouse.
- Help to train new refinery and casting personnel.
- Must follow all of Exide's safety rules and practices.



## JOB DESCRIPTION

JOB TITLE: CASTER

FUNCTION: PERFORM ALL TASKS REQUIRED BY THE REFINERY OPERATOR FOR THE PRODUCTION OF LEAD AND LEAD ALLOYS.

TECHNICAL REQUIREMENTS: ON THE JOB TRAINING, MOBILE EQUIPMENT OPERATIONS AND SOME BASIC MECHANICAL APTITUDE.

TRAINING: TRAINING WILL INCLUDE, BASIC ENVIRONMENTAL REGULATIONS, CHEMICAL HANDLING, CONTINGENCY PLAN, LEAD SMELTING AND RECYCLING, PROPER CLEANUP PROCEDURES, AND ALL EXIDE SAFETY PROCEDURES INCLUDING LOCKOUT TAG-OUT, CONFINED SPACE ENTRY, RIGHT-TO-KNOW, BLOOD LEAD MONITORING, RESPIRATORY PROTECTION, AND MSDS.

### DUTIES AND RESPONSIBILITIES:

- Must follow instructions of the refinery operator or refinery foreman.
- Perform routine maintenance work.
- Maintain good housekeeping of the work area.
- Must follow all of Exide's safety rules and practices.

## **JOB DESCRIPTION**

**JOB TITLE:** LABORATORY TECHNICIAN

**FUNCTION:** PERFORM ALL TASKS ASSOCIATED WITH ALL THE LABORATORY OPERATIONS.

**TECHNICAL REQUIREMENTS:** BASIC UNDERSTANDING OF CHEMISTRY, LEAD SMELTING, REFINING AND INSTRUMENTATION.

**TRAINING:** TRAINING WILL INCLUDE, BASIC ENVIRONMENTAL REGULATIONS, CHEMICAL HANDLING, CONTINGENCY PLAN, PROPER CLEANUP PROCEDURES, AND ALL EXIDE SAFETY PROCEDURES INCLUDING LOCKOUT TAG-OUT, CONFINED SPACE ENTRY, RIGHT-TO-KNOW, BLOOD LEAD MONITORING, RESPIRATORY PROTECTION, AND MSDS.

**DUTIES AND RESPONSIBILITIES:**

- Log in all samples received by the lab.
- Analyze samples and prepare analysis forms.
- Take inventory and order chemicals and reagents as needed.
- Perform routine maintenance work.
- Maintain good housekeeping in the lab.
- Must follow all of Exide's safety rules and practices.

## **JOB DESCRIPTION**

**JOB TITLE:** FURNACE SUPERVISOR

**FUNCTION:** SUPERVISE THE OPERATIONS OF THE SMELTERS TWO BLAST FURNACES AND ONE REVERBATORY FURNACE.

**TECHNICAL REQUIREMENTS:** MUST HAVE SEVERAL YEARS EXPERIENCE IN FURNACE OPERATIONS, KNOW FURNACE OPERATIONS COMPLETELY AND HAVE A HIGH DEGREE OF MECHANICAL APTITUDE.

**TRAINING:** TRAINING WILL INCLUDE, BASIC ENVIRONMENTAL REGULATIONS, CHEMICAL HANDLING, CONTINGENCY PLAN, LEAD SMELTING AND RECYCLING, PROPER CLEANUP PROCEDURES, AND ALL EXIDE SAFETY PROCEDURES INCLUDING LOCKOUT TAG-OUT, CONFINED SPACE ENTRY, RIGHT-TO-KNOW, BLOOD LEAD MONITORING, RESPIRATORY PROTECTION, AND MSDS.

**DUTIES AND RESPONSIBILITIES:**

- Understand and oversee all phases of furnace operations including:
  - ◆ Ensuring each furnace is properly charged,
  - ◆ Checking that no smoke is allowed to escape from the hoods,
  - ◆ Ensuring that proper startup and shut-down procedures are followed and documented,
  - ◆ Maintain furnace feed rations, to allow for consistent operations.
- Must direct and supervise all work incidental to the furnace operations.
- Work with the baghouse crew to ensure proper ventilation.
- Train, instruct and supervise new furnace operators and helpers.
- Must follow all of Exide's safety rules and practices, and be sure that all of the furnace operators and crews are following safety practices.

## **JOB DESCRIPTION**

**JOB TITLE:** FURNACE OPERATOR

**FUNCTION:** OPERATE THE BLAST FURNACE OR THE REVERBATORY FURNACE.

**TECHNICAL REQUIREMENTS:** MUST HAVE EXPERIENCE IN FURNACE OPERATIONS, METALLURGY, CHARGING AND HAVE A HIGH DEGREE OF MECHANICAL APTITUDE.

**TRAINING:** TRAINING WILL INCLUDE BASIC ENVIRONMENTAL REGULATIONS, CHEMICAL HANDLING, CONTINGENCY PLAN, LEAD SMELTING AND RECYCLING, PROPER CLEANUP PROCEDURES, AND ALL EXIDE SAFETY PROCEDURES INCLUDING LOCKOUT TAG-OUT, CONFINED SPACE ENTRY, RIGHT-TO-KNOW, BLOOD LEAD MONITORING, RESPIRATORY PROTECTION, AND MSDS.

**DUTIES AND RESPONSIBILITIES:**

- Direct all functions required to set up and operate the furnace.
- Work with the baghouse crew to ensure proper ventilation.
- Train and instruct new furnace operators.
- Must follow all of Exide's safety rules and practices.

## **JOB DESCRIPTION**

**JOB TITLE:** FURNACE HELPER

**FUNCTION:** ASSIST IN THE OPERATION OF THE BLAST FURNACE OR THE REVERBATORY FURNACE.

**TECHNICAL REQUIREMENTS:** MUST HAVE EXPERIENCE IN FURNACE OPERATIONS, AND HAVE A HIGH DEGREE OF MECHANICAL APTITUDE.

**TRAINING:** TRAINING WILL INCLUDE BASIC ENVIRONMENTAL REGULATIONS, CHEMICAL HANDLING, CONTINGENCY PLAN, LEAD SMELTING AND RECYCLING, PROPER CLEANUP PROCEDURES, AND ALL EXIDE SAFETY PROCEDURES INCLUDING LOCKOUT TAG-OUT, CONFINED SPACE ENTRY, RIGHT-TO-KNOW, BLOOD LEAD MONITORING, RESPIRATORY PROTECTION, AND MSDS.

**DUTIES AND RESPONSIBILITIES:**

- Assist the Furnace Operator in set up and operation the furnace.
- Perform routine maintenance.
- Must follow all of Exide's safety rules and practices.

## **JOB DESCRIPTION**

**JOB TITLE:** WASTEWASTE TREATMENT PLANT OPERATOR

**FUNCTION:** MAINTAIN THE WASTEWATER TREATMENT PLANT TO ENSURE OPERATIONS WITHIN THE PERMITTED PARAMETERS.

**TECHNICAL REQUIREMENTS:** MUST HAVE SEVERAL YEARS EXPERIENCE IN TREATMENT PLANT OPERATIONS, WATER AND ACID CHEMISTRY, AND EQUIPMENT MAINTENANCE.

**TRAINING:** TRAINING WILL INCLUDE BASIC ENVIRONMENTAL REGULATIONS, CHEMICAL HANDLING, CONTINGENCY PLAN, pH CALIBRATION AND MONITORING, PROPER CLEANUP PROCEDURES, AND ALL EXIDE SAFETY PROCEDURES INCLUDING LOCKOUT TAG-OUT, RIGHT-TO-KNOW, BLOOD LEAD MONITORING, RESPIRATORY PROTECTION, AND MSDS.

**DUTIES AND RESPONSIBILITIES:**

- Must be able to operate all of the equipment used in the wastewater treatment plant.
- Must be familiar with all of the monitoring procedures and instrumentation used in the treatment plant.
- Is responsible for control of chemical dosing and monitoring, to maintain the treatment plant operations within the permitted specifications.
- Is responsible for all operations and maintenance of equipment.
- Must follow all of Exide's safety rules and practices.

## **JOB DESCRIPTION**

**JOB TITLE:** BAGHOUSE OPERATOR

**FUNCTION:** MAINTAIN THE BAGHOUSES TO ENSURE OPERATIONS WITHIN THE PERMITTED PARAMETERS.

**TECHNICAL REQUIREMENTS:** MUST HAVE SEVERAL YEARS EXPERIENCE IN BAGHOUSE OPERATIONS, AND EQUIPMENT MAINTENANCE.

**TRAINING:** TRAINING WILL INCLUDE BASIC ENVIRONMENTAL REGULATIONS, BAG HANDLING, BAGHOUSE CLEANUP PROCEDURES, CONTINGENCY PLAN AND ALL EXIDE SAFETY PROCEDURES INCLUDING LOCKOUT TAG-OUT, CONFINED SPACE ENTRY, RIGHT-TO-KNOW, BLOOD LEAD MONITORING, RESPIRATORY PROTECTION, AND MSDS.

### **DUTIES AND RESPONSIBILITIES:**

- Must be able to operate all of the equipment used in the baghouses.
- Must be familiar with the continuous emissions monitoring system used in the baghouses.
- Must monitor and maintain furnace and kettle floor draft controls.
- Must monitor and document temperature, pressure, blower amps, and flows in the baghouses on a daily basis.
- Must check and document the condition of the baghouse interiors on a weekly basis.
- Must check and document shaker mechanism, isolation dampers, bag tension and fans, on a monthly basis.
- Must check and document the baghouse sprinkle system monthly.
- Must change bags when necessary.
- Must assist dust reverbatory furnace operator.
- Must follow all of Exide's safety rules and practices.

## **JOB DESCRIPTION**

**JOB TITLE:** DUST REVERBATORY FURNACE OPERATOR

**FUNCTION:** OPERATE ONE OF THE TWO DUST REVERBATORY FURNACES.

**TECHNICAL REQUIREMENTS:** MUST HAVE SEVERAL YEARS EXPERIENCE AS AN OPERATOR, MUST HAVE A HIGH DEGREE OF TECHNICAL APTITUDE, MUST KNOW THE BASIC ELEMENTS OF BAGHOUSE OPERATIONS.

**TRAINING:** TRAINING WILL INCLUDE BASIC ENVIRONMENTAL REGULATIONS, CONTINGENCY PLAN, FURNACE OPERATIONS, CLEANUP PROCEDURES, AND ALL EXIDE SAFETY PROCEDURES INCLUDING LOCKOUT TAG-OUT, CONFINED SPACE ENTRY, RIGHT-TO-KNOW, BLOOD LEAD MONITORING, RESPIRATORY PROTECTION, AND MSDS.

**DUTIES AND RESPONSIBILITIES:**

- Operate one of the two dust reverbatory furnaces in a safe and environmentally sound manner.
- Complete daily documentation of activities.
- Perform preventive maintenance of the furnaces.
- Assist baghouse crew in maintenance and upkeep of the baghouses.
- Must follow all of Exide's safety rules and practices.



## JOB DESCRIPTION

JOB TITLE: SLAG STABILIZATION OPERATOR

FUNCTION: OPERATE THE SLAG STABILIZATION UNIT WITHIN THE PERMITTED PARAMETERS.

TECHNICAL REQUIREMENTS: MUST HAVE SEVERAL YEARS EXPERIENCE OPERATING THE SLAG STABILIZATION UNIT, MUST BE A MOBILE EQUIPMENT OPERATOR AND HAVE EXPERIENCE WITH EQUIPMENT MAINTENANCE.

TRAINING: TRAINING WILL INCLUDE BASIC ENVIRONMENTAL REGULATIONS, CONTINGENCY PLAN SLAG HANDLING, CLEANUP PROCEDURES, AND ALL EXIDE SAFETY PROCEDURES INCLUDING LOCKOUT TAG-OUT, CONFINED SPACE ENTRY, RIGHT-TO-KNOW, BLOOD LEAD MONITORING, RESPIRATORY PROTECTION, AND MSDS.

DUTIES AND RESPONSIBILITIES:

- Must be able to operate all of the equipment used at the slag stabilization unit in a safe and environmentally sound manner.
- Must be familiar with the landfill operations and requirements.
- Must be able to sort slag to ensure that only blast furnace slag is processed.
- Must maintain good housekeeping in the area.
- Must follow all of Exide's safety rules and practices.

## JOB DESCRIPTION

JOB TITLE: YARD MAN

FUNCTION: PERFORM TASKS ASSOCIATED WITH ALL PHASES OF THE YARD OPERATIONS.

TECHNICAL REQUIREMENTS: MUST BE A MOBILE EQUIPMENT OPERATOR AND HAVE EXPERIENCE HANDLING, SHIPPING AND RECEIVING PRODUCTS.

TRAINING: TRAINING WILL INCLUDE BASIC ENVIRONMENTAL REGULATIONS, CONTINGENCY PLAN, INCOMING HAZARDOUS MATERIAL HANDLING, CLEANUP PROCEDURES, AND ALL EXIDE SAFETY PROCEDURES INCLUDING LOCKOUT TAG-OUT, CONFINED SPACE ENTRY, RIGHT-TO-KNOW, BLOOD LEAD MONITORING, RESPIRATORY PROTECTION, AND MSDS.

### DUTIES AND RESPONSIBILITIES:

- Load produced lead for shipment.
- Unload lead-bearing materials (including hazardous materials) for recycling.
- Load sodium sulfate salt for shipment.
- Unload coke for blast furnace operations.
- Must maintain good housekeeping in the area.
- Must follow all of Exide's safety rules and practices.

## JOB DESCRIPTION

JOB TITLE: YARD FOREMAN

FUNCTION: SUPERVISE THE YARD OPERATION AND PERSONNEL.

TECHNICAL REQUIREMENTS: MUST HAVE SEVERAL YEARS EXPERIENCE WORKING IN THE YARD, MUST HAVE A HIGH DEGREE OF MECHANICAL APTITUDE.

TRAINING: TRAINING WILL INCLUDE BASIC ENVIRONMENTAL REGULATIONS, CONTINGENCY PLAN, HAZARDOUS MATERIAL HANDLING, AND ALL EXIDE SAFETY PROCEDURES INCLUDING LOCKOUT TAG-OUT, CONFINED SPACE ENTRY, RIGHT-TO-KNOW, BLOOD LEAD MONITORING, RESPIRATORY PROTECTION, AND MSDS.

### DUTIES AND RESPONSIBILITIES:

- Direct and supervise all work incidental to the yard department operation including personnel and maintenance of equipment.
- Order supplies used by the yard crew.
- Monitor truck traffic and speed limits in and out of the smelter.
- Supervise loading of products and unloading of incoming materials and supplies.
- Train, instruct and supervise new employees on the yard crew.
- Must follow all of Exide's safety rules and practices, and be sure that all of the yard crew is following safety practices.

## **JOB DESCRIPTION**

**JOB TITLE:** CX BATTERY BREAKER SUPERVISOR

**FUNCTION:** SUPERVISE THE BATTERY BREAKER OPERATION AND PERSONNEL.

**TECHNICAL REQUIREMENTS:** MUST HAVE EXPERIENCE WORKING IN THE BATTERY BREAKER UNIT, MUST HAVE A HIGH DEGREE OF MECHANICAL APTITUDE AND CHEMICAL KNOWLEDGE.

**TRAINING:** TRAINING WILL INCLUDE BASIC ENVIRONMENTAL REGULATIONS, CONTINGENCY PLAN, CHEMICAL HANDLING, AND ALL EXIDE SAFETY PROCEDURES INCLUDING LOCKOUT TAG-OUT, CONFINED SPACE ENTRY, RIGHT-TO-KNOW, BLOOD LEAD MONITORING, RESPIRATORY PROTECTION, AND MSDS.

### **DUTIES AND RESPONSIBILITIES:**

- Direct and supervise all work at the battery breaker operation including personnel and maintenance of equipment.
- Inventory and order any supplies, chemicals and equipment necessary for the operation of the unit.
- Monitor the unloading dock to be sure that enough batteries are available and stored properly.
- Supervise the breaker unit operations including monitoring all of the neutralization, desulfurization and crystallization procedures.
- Ensure that samples are collected following the proper procedures and frequencies.
- Complete proper documentation of activities.
- Train, instruct and supervise new employees on the battery breaker crew.
- Must follow all of Exide's safety rules and practices, and be sure that all of the battery breaker crew is following safety practices.

## **JOB DESCRIPTION**

**JOB TITLE:** CX BATTERY BREAKER OPERATOR

**FUNCTION:** CONTROL AND OPERATE THE CX BATTERY BREAKER UNIT.

**TECHNICAL REQUIREMENTS:** MUST COMPLETE OPERATOR TRAINING AT THE BATTERY BREAKER UNIT, MUST HAVE A HIGH DEGREE OF MECHANICAL APTITUDE AND CHEMICAL KNOWLEDGE.

**TRAINING:** TRAINING WILL INCLUDE BASIC ENVIRONMENTAL REGULATIONS, CONTINGENCY PLAN, CHEMICAL HANDLING, AND ALL EXIDE SAFETY PROCEDURES INCLUDING LOCKOUT TAG-OUT, CONFINED SPACE ENTRY, RIGHT-TO-KNOW, BLOOD LEAD MONITORING, RESPIRATORY PROTECTION, AND MSDS.

### **DUTIES AND RESPONSIBILITIES:**

- Perform all work incidental to the battery breaker operation.
- Monitor the performance of the unit.
- Perform routine and preventive maintenance.
- Calibrate and adjust meters.
- Collect all of the required samples.
- Train, instruct and supervise new employees on the yard crew.
- Must follow all of Exide's safety rules and practices.

## **JOB DESCRIPTION**

**JOB TITLE:** CX BATTERY BREAKER DOCK LEADER

**FUNCTION:** SUPERVISE THE LOADING DOCK AT THE CX BATTERY BREAKER UNIT.

**TECHNICAL REQUIREMENTS:** MUST HAVE EXPERIENCE WORKING AT THE BATTERY BREAKER DOCK, MUST BE A MOBIL EQUIPMENT OPERATOR.

**TRAINING:** TRAINING WILL INCLUDE BASIC ENVIRONMENTAL REGULATIONS, CONTINGENCY PLAN, CHEMICAL (BATTERY) HANDLING, AND ALL EXIDE SAFETY PROCEDURES INCLUDING LOCKOUT TAG-OUT, CONFINED SPACE ENTRY, RIGHT-TO-KNOW, BLOOD LEAD MONITORING, RESPIRATORY PROTECTION, AND MSDS.

### **DUTIES AND RESPONSIBILITIES:**

- Direct and supervise the work at the dock including personnel and maintenance of equipment.
- Be sure that the unit has a steady supply of batteries.
- Monitor truck traffic in and out of the dock.
- Supervise unloading of batteries to ensure that incompatible materials are not feed into the unit.
- Train, instruct and supervise new employees on the dock crew.
- Must follow all of Exide's safety rules and practices.

## **JOB DESCRIPTION**

**JOB TITLE:** CX BATTERY BREAKER DOCK CREW

**FUNCTION:** UNLOAD BATTERIES AT THE DOCK AND FEED THEM INTO THE CX BATTERY BREAKER UNIT.

**TECHNICAL REQUIREMENTS:** MUST BE A MOBIL EQUIPMENT OPERATOR AND HAVE A HIGH DEGREE OF MECHANICAL APTITUDE.

**TRAINING:** TRAINING WILL INCLUDE BASIC ENVIRONMENTAL REGULATIONS, CONTINGENCY PLAN, CHEMICAL (BATTERY) HANDLING, AND ALL EXIDE SAFETY PROCEDURES INCLUDING LOCKOUT TAG-OUT, CONFINED SPACE ENTRY, RIGHT-TO-KNOW, BLOOD LEAD MONITORING, RESPIRATORY PROTECTION, AND MSDS.

**DUTIES AND RESPONSIBILITIES:**

- Unload batteries from trucks onto the dock.
- Remove the shrink wrap and cardboard from the batteries.
- Inspect batteries to insure that they are compatible.
- Load batteries into the unit.
- Must follow all of Exide's safety rules and practices.

## JOB DESCRIPTION

JOB TITLE: MECHANIC

FUNCTION: REPAIR AND UP-KEEP OF ALL PLANT EQUIPMENT, VEHICLES AND SYSTEMS.

TECHNICAL REQUIREMENTS: HIGH DEGREE OF MECHANICAL APTITUDE.

TRAINING: TRAINING WILL INCLUDE BASIC ENVIRONMENTAL REGULATIONS, CONTINGENCY PLAN, CHEMICAL HANDLING, AND ALL EXIDE SAFETY PROCEDURES INCLUDING LOCKOUT TAG-OUT, CONFINED SPACE ENTRY, RIGHT-TO-KNOW, BLOOD LEAD MONITORING, RESPIRATORY PROTECTION, AND MSDS.

### DUTIES AND RESPONSIBILITIES:

- Inspect, maintain and repair all of the plant mobile equipment (sweeper, forklifts, scoops, backhoe and dump trucks).
- Install, maintain, troubleshoot and repair pumps, conveyors, gearboxes, and hydraulic systems.
- Install, maintain and repair all piping in the plant.
- Install, maintain and repair valves, hoses, fittings, bearing, gages and meters.
- Operate mobile equipment.
- Must follow all of Exide's safety rules and practices.



## **JOB DESCRIPTION**

**JOB TITLE:** ELECTRICIAN

**FUNCTION:** REPAIR AND MAINTAIN ALL OF THE PLANT ELECTRICAL SYSTEMS.

**TECHNICAL REQUIREMENTS:** HIGH DEGREE OF ELECTRICAL KNOWLEDGE AND MECHANICAL APTITUDE.

**TRAINING:** TRAINING WILL INCLUDE BASIC ENVIRONMENTAL REGULATIONS, CONTINGENCY PLAN, CHEMICAL HANDLING, AND ALL EXIDE SAFETY PROCEDURES INCLUDING LOCKOUT TAG-OUT, CONFINED SPACE ENTRY, RIGHT-TO-KNOW, BLOOD LEAD MONITORING, RESPIRATORY PROTECTION, AND MSDS.

### **DUTIES AND RESPONSIBILITIES:**

- Repair all of the plant electrical systems.
- Work with plant engineers on the installation of new electrical systems.
- Inspect and calibrate equipment.
- Maintain inventory and order electrical supplies and equipment.
- Operate mobile equipment.
- Must follow all of Exide's safety rules and practices.

## JOB DESCRIPTION

JOB TITLE: WELDER

FUNCTION: REPAIR AND UPKEEP OF ALL OF THE PLANT METAL SURFACES.

TECHNICAL REQUIREMENTS: WELDING EXPERIENCE AND MECHANICAL APTITUDE.

TRAINING: TRAINING WILL INCLUDE BASIC ENVIRONMENTAL REGULATIONS, CONTINGENCY PLAN, CHEMICAL HANDLING, AND ALL EXIDE SAFETY PROCEDURES INCLUDING LOCKOUT TAG-OUT, CONFINED SPACE ENTRY, RIGHT-TO-KNOW, BLOOD LEAD MONITORING, RESPIRATORY PROTECTION, AND MSDS.

### DUTIES AND RESPONSIBILITIES:

- Weld and repair all metal units including baghouses, blast furnaces, reverbatory furnace, dust reverb furnaces, slag crusher, battery breaker, casting machines and refinery kettles.
- Repair all metal flue pipes, water lines, tanks, and screw conveyors.
- Assist mechanic with repair and upkeep of plant equipment.
- Fabricate equipment and parts.
- Maintain an inventory of welding supplies and order supplies and equipment when needed.
- Operate mobile equipment.
- Must follow all of Exide's safety rules and practices.

## **JOB DESCRIPTION**

**JOB TITLE:** CHANGE HOUSE, LUNCHROOM AND RESPIRATOR MAINTENANCE OPERATOR

**FUNCTION:** PERFORM TASK ASSOCIATED WITH MAINTAINING RESPIRATORS, CLEANING THE CHANGE HOUSE AND THE LUNCHROOM.

**TECHNICAL REQUIREMENTS:** MUST BE ABLE TO FOLLOW SPECIFIC PROCEDURES AND CLEANING INSTRUCTIONS.

**TRAINING:** TRAINING WILL INCLUDE BASIC ENVIRONMENTAL REGULATIONS, CONTINGENCY PLAN, CHEMICAL HANDLING, PROPER CLEAN-UP PROCEDURES, AND ALL EXIDE SAFETY PROCEDURES INCLUDING LOCKOUT TAG-OUT, CONFINED SPACE ENTRY, RIGHT-TO-KNOW, BLOOD LEAD MONITORING, RESPIRATORY PROTECTION, AND MSDS.

### **DUTIES AND RESPONSIBILITIES:**

- Clean and repair respirators daily.
- Supervise and conduct cleaning of the change house and the lunchroom daily.
- Issue all of the required personal protective equipment.
- Wash, dry and sort work clothes, coveralls, and associated clothing daily.
- Maintain an inventory of supplies and order supplies and equipment when needed.
- Must follow all of Exide's safety rules and practices.

## JOB DESCRIPTION

JOB TITLE: YARD SUPERVISOR

FUNCTION: SUPERVISE THE YARD OPERATION AND PERSONNEL.

TECHNICAL REQUIREMENTS: MUST HAVE SEVERAL YEARS EXPERIENCE WORKING IN THE YARD, MUST HAVE A HIGH DEGREE OF MECHANICAL APTITUDE.

TRAINING: TRAINING WILL INCLUDE BASIC ENVIRONMENTAL REGULATIONS, CONTINGENCY PLAN, HAZARDOUS MATERIAL HANDLING, AND ALL EXIDE SAFETY PROCEDURES INCLUDING LOCKOUT TAG-OUT, CONFINED SPACE ENTRY, RIGHT-TO-KNOW, BLOOD LEAD MONITORING, RESPIRATORY PROTECTION, AND MSDS.

### DUTIES AND RESPONSIBILITIES:

- Direct and supervise all work incidental to the yard department operation including personnel and maintenance of equipment.
- Review and sign hazardous waste manifests associated with the receipt of incoming shipments of hazardous waste.
- Monitor truck traffic and speed limits in and out of the smelter.
- Supervise loading of products and unloading of incoming materials and supplies.
- Train, instruct and supervise new employees on the yard crew.
- Must follow all of Exide's safety rules and practices, and be sure that all of the yard crew is following safety practices.

**RESPONSE  
ATTACHMENT A14**

## **APPENDIX 14**

**The requirements of the Spill Prevention, Control and Countermeasures  
Plan have been incorporated into Appendix 6, RCRA Contingency Plan  
and Emergency Response Plan**

**RESPONSE  
ATTACHMENT A15**

# **APPENDIX 15**

## **WASTE MINIMIZATION PLAN**



# **WASTE MINIMIZATION PLAN**

**EXIDE TECHNOLOGIES  
BATON ROUGE SMELTER  
BATON ROUGE, LOUISIANA**

**EPA ID NUMBER: LAD 008184137**

October 2006

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## 1.0 INTRODUCTION

Exide Technologies (Exide) is committed to managing wastes generated by the Baton Rouge Smelter in an environmentally sound manner. As a part of the overall environmental policy, Exide is focusing efforts to reduce the amount of waste material generated by implementing an effective waste minimization program. The goal of Exide's Waste Minimization Plan is to significantly reduce the amount of waste that is generated and disposed of from the Baton Rouge Smelter. Meeting this goal will help to reduce operating costs, limit potential liabilities and strengthen the Baton Rouge Smelter's public image of concern for improving the environment and it's employee's work place. Exide's management is in full support of this waste minimization program.

Waste minimization is the reduction of wastes generated, by one of two main methods, source reduction and recycling. Source reduction is the reduction or elimination of waste at the source, usually within the process. Recycling is the use or reuse of a waste as an effective substitute for a commercial product or as an ingredient or feedstock in an industrial process. Additional waste minimization practices include inventory controls, reclassification of wastes, waste segregation, spill control and good housekeeping practices.

This Waste Minimization Plan outlines procedures for waste reduction and provides examples of waste minimization programs that are currently in practice at the Baton Rouge Smelter. This plan includes a description of waste minimization assessment procedures, including an initial assessment that was completed by Exide, identifying target waste streams to be reduced and setting goals for this reduction. Additionally, this plan discusses source reduction procedures, recycling procedures and additional waste reduction practices that can be incorporated at the Baton Rouge Smelter.

## 2.0 BACKGROUND

Exide processes lead bearing raw materials, including spent lead acid batteries, emissions control dust, sludges and by products into metallic lead for resale and reuse. Some of the raw materials used in the process and stored on site are classified as hazardous wastes by regulation. Exide was issued a Hazardous Waste Permit (LAD008184137) to operate three container storage areas (the Truck/trailer Storage area, the K069/D008 Storage Area and the Whole Battery Storage area). Exide operates a Containment Building, which is currently under interim status. A hazardous waste treatment unit, the Slag Stabilization unit, is also permitted under LAD008184137.

Most of the raw materials used by the Baton Rouge smelter to produce lead are purchased off-site. The lead-bearing raw materials are delivered to the facility in trucks or trailers and are unloaded at the loading dock. If the material is classified a hazardous, it will be received under manifest, as specified in the Louisiana Department of Environmental Quality, Hazardous Waste Division Environmental Regulatory Code. Other nonhazardous and exempt materials are received under bill of lading. Some of these lead-bearing materials are received in drums. These drums will be emptied directly into a feedstock pile in the Containment Building or held temporarily in the K069/D008 Storage Area.

Lead acid batteries are either fed directly into the battery breaker or are stored temporarily onsite in one of two permitted storage area, the truck/trailer storage area or the whole battery storage area. Lead acid batteries are processed in the battery breaker unit, by cutting the batteries, and hydraulically separating the individual components. The plastic is thoroughly washed to remove residual acid and lead. It is then loaded into trailers and shipped offsite for recycling. The battery acid, a weak sulfuric acid solution, is neutralized with sodium hydroxide and crystallized to form sodium sulfate salt. The salt is sold as a product to a broker who sells the salt to others. There is a thriving industrial marketplace for sodium sulfate salt. Sodium sulfate salt has many industrial uses including as a bleaching agent in pulp and paper production and as an ingredient in laundry detergent. The lead material from the batteries is processed to convert lead sulfate to lead oxide. The lead oxide paste is then stored in the Paste Storage Area of the containment building, prior to recycling.

The facility operates one blast furnace and one reverberatory furnace that are used to smelt the lead-bearing raw materials. The molten lead is cast either into ingots using two casting machines or blocks using molds. Additionally, the facility operates a billet casting machine to produce lead billets. The finished lead is tested to determine if it meets client specifications and is then loaded into trucks and transported off-site for reuse.

As a part of the lead recycling, a blast furnace slag is generated. This slag contains mostly iron, silica and calcium oxides, with typically less than 1% lead. However, the slag is classified as a hazardous waste due to the lead content, since it typically cannot pass the TCLP analysis for lead. The slag is allowed to cool, crushed to small diameter, and treated using a mixture of cement and sodium silicate, as specified in the facilities Hazardous Waste Permit. The stabilized slag is rock-like in appearance and engineering properties. After treatment, the slag is placed in a permitted onsite Solid Waste landfill.

### 3.0 WASTE MINIMIZATION ASSESSMENT

In order to meet the goal of minimizing the amount of waste generated at the Baton Rouge Smelter, a comprehensive management approach to waste is necessary. The first step in this management approach was to conduct a waste minimization assessment. This assessment consisted of a waste inventory to identifying the types of waste generated at the smelter and an assessment to look at ways to reduce or eliminate this waste. The assessment reviewed plant operations and waste streams, and select specific areas as targets for waste minimization. As a part of this Waste Minimization Plan, a waste minimization assessment will be performed annually to review current waste minimization practices and develop strategies for new initiatives.

Exide has performed the initial waste minimization assessment as described above. Table 1 presents a list of wastes that are produced at the Baton Rouge Smelter. The inventory identified six hazardous waste streams. Three of the hazardous waste streams, baghouse dust, old baghouse bags and wastewater treatment plant sludges are currently recycled in the furnaces to reclaim lead content. The highest volume waste stream that is not being reused or recycled is the spent blast furnace slag. The assessment identified a number of long-range goals for minimization of the slag. The inventory also identified thirteen nonhazardous and solid waste streams. The waste assessment indicated that four of the waste streams are currently being recycled. The assessment also identified several low volume wastes generated at the Smelter, such as waste paper and wooden pallets, that might be successfully addressed for recycling over the short term.

## **4.0 TYPES OF WASTE MINIMIZATION PRACTICES**

This section presents an overview of waste minimization practices based on EPA guidance documents on facility pollution prevention. Also included in this section is specific information about waste minimization projects that are currently incorporated at the Baton Rouge Smelter.

### **4.1 Source Reduction Efforts**

Source reduction is the reduction or elimination of waste generated at the source, within the process. These efforts involve changing the way the chemical process actually occurs or substituting the chemicals used to create the finished product. Source reduction is the most effective method of waste minimization, but it is also potentially the most complex and expensive since it involves process changes. Source reduction methods include process changes, alternative feedstocks or raw materials, improvements in feedstock purity, increases in efficiency of machinery and recycling within the process (recycle loops).

An example of source reduction that can be employed at the Baton Rouge Smelter is the use of desulfurization of the battery plate feed material. By desulfurizing the battery plates, the slag generated from the blast furnace will typically have a lower lead content, therefore requiring less treatment prior to disposal, and reducing the volume in the landfill.

### **4.2 Recycling Efforts**

Recycling is the use or reuse of an intermediate or byproduct (that would otherwise be discarded as a waste) as an effective substitute for a commercial product, or as an ingredient or feedstock in a process. Recycling also includes reuse of wastes or constituents of a waste. The Baton Rouge Smelter is a recycling facility that recycles spent lead acid batteries and lead-bearing material.

Many of the waste streams identified in the initial waste minimization assessment are currently being recycled, including:

- Used oil, collected from the autoshop and brought in by Exide employees. This oil is recovered by a commercial facility for energy recovery or refining.
- Scrap metals (steel and iron) are collected and recycled through a commercial scrap metal facility.
- Metal drums are processed through the blast furnace as iron flux.
- Fluorescent light bulbs are collected and recycled by an approved commercial facility.
- All of the lead bearing waste materials generated by the Baton Rouge Smelter are recycled in the furnaces, including all of the baghouse dust generated by the five site baghouses, any old and worn baghouse bags, used tyvek suits, old respirator cartridges, and wastewater treatment plant sludge.

- Sulfuric acid is neutralized and crystallized to form sodium sulfate salt that is sold as a product to a broker who sells the salt to others.
- Paint waste generated from facility maintenance will be minimized by purchasing the amount needed to complete the specific project, re-using leftover paint material in a timely manner, and reducing solvent based paint. Paint waste is collected and shipped for energy recovery.

Exide is continuing to look for new recycling opportunities. The waste minimization assessment identified several waste streams as potential candidates for recycling, including white paper, aluminum cans and pallets.

#### **4.3 Other Waste Minimization Practices**

Other waste minimization practices include inventory controls, waste segregation, spill control and good housekeeping practices. Inventory control involves the reduction of on hand quantities of potentially dangerous chemicals. This will reduce the amount of waste that could result from spills or expired shelf-life. Waste segregation includes proper handling of wastes to avoid volume increases. Spill control and good housekeeping practices are in place to reduce the amount of waste generated by spills or process upsets. In the case of the salt generated by the battery breaker operations, reducing the amount of salt that is spilled during loading and sampling of the transport vehicles has reduced the amount of material that needed to be disposed on through an offsite disposal company. Additionally, by implementing improved spill control policies, the amount of spilled salt that is generated is small enough that it can be reintroduced into the process.

## 5.0 TRAINING

Waste minimization training will be conducted as a part of Exide's Environmental Training Program. Training will include discussion of waste minimization goals, proper material handling and placement, and continued evaluation of waste reduction strategies.



## 6.0 CONCLUSIONS

The Waste Minimization Plan is designed to significantly reduce the amount of waste that is generated and disposed of from the Baton Rouge Smelter. Waste minimization will improve profitability and reduce regulatory compliance cost, liability and risk. By reducing the amount of waste generated at the Baton Rouge Smelter, Exide will achieve improved protection of the environment and provide a healthier work place for the employees. Exide has already made strides in reducing wastes; however, new and innovative waste reduction methods are still necessary to meet the goal of this plan. Meeting the goal of waste minimization is the responsibility of each employee and must become an accepted part of the day to day plant operations.

This Waste Minimization Plan will be reviewed annually and will be updated as necessary.

## TABLES

**TABLE 1****WASTE GENERATED BY THE BATON ROUGE SMELTER**

<u>TYPE OF WASTE</u>	<u>GENERATING DEPARTMENT</u>	<u>PROPER PLACEMENT</u>
<u>HAZARDOUS WASTE</u>		
1) Baghouse Dust	Baghouse Crew	Recycle - Furnace
2) Old Baghouse Bags	Baghouse Crew	Recycle - Furnace
3) Wastewater Treatment Plant Sludge	Wastewater Treatment	Recycle - Furnace
4) Spent Refractory Brick	Production	Waste Management/ Recycle Furnace
5) Blast Furnace Slag	Production	Stabilize, Onsite Landfill
<u>SOLID and NONHAZARDOUS WASTE</u>		
1) Lunch Room Trash	All Departments	Commercial Solid Waste
2) Cardboard and Shrink Warp	Battery Breaker	Commercial Solid Waste
3) Wooden Pallets	Battery Breaker	Shredder or Recycle
4) Tyvek Suits	All Departments	Recycle - Furnace
5) Office Trash	Office	Commercial Solid Waste
6) Fluorescent Light Bulbs	Electrical	Recycle
7) Empty 55-Gallon Drums	Dock	Wash and Recycle
8) Scrap Steel and Iron	All Departments	Recycle
9) Scrap PVC Pipe	Maintenance	Commercial Solid waste
10) Construction Debris	All Departments	Onsite Landfill
11) Off-Spec Salt	Battery Breaker	Offsite Industrial Solid Waste
12) Expired or Unused Chemicals	Laboratory	Furnace (if there is potential for lead recovery) or Lab Pack (if there is no potential for lead recovery)
13) Parts Washing Solvents	Maintenance	Solvent Recovery
14) Used Oil	Maintenance	Oil Recover
15) Scrap Tires	Maintenance	Commercial Tire

**RESPONSE  
ATTACHMENT A21**

## **APPENDIX 21**

### **DOCUMENTATION FOR NO HISTORICAL OR ECOLOGICAL IMPACTS**



# DEPARTMENT OF THE ARMY

NEW ORLEANS DISTRICT, CORPS OF ENGINEERS

P.O. BOX 60267

NEW ORLEANS, LOUISIANA 70160-0267

REPLY TO  
ATTENTION OF:

September 7, 2006

Operations Division  
Surveillance and Enforcement Section

SEP 14 2006

BY: .....

Ms. Jennifer W. DiJoseph  
Advanced GeoServices Corp.  
1055 Andrew Drive, Suite A  
West Chester, PA 19380-4293

Dear Ms. DiJoseph:

Reference is made to your request, on behalf of Exide Technologies, for a U.S. Army Corps of Engineers' (Corps) jurisdictional determination on property located in Section 44, Township 5 South, Range 1 West, East Baton Rouge Parish, Louisiana (enclosed map). Specifically, this site is identified as a secondary lead smelting site located at 2400 Brooklawn Drive in Baton Rouge, LA.

Based on review of maps, aerial photography, and soils data, we have determined that there are jurisdictional wetlands within 1,000 feet of the subject site.

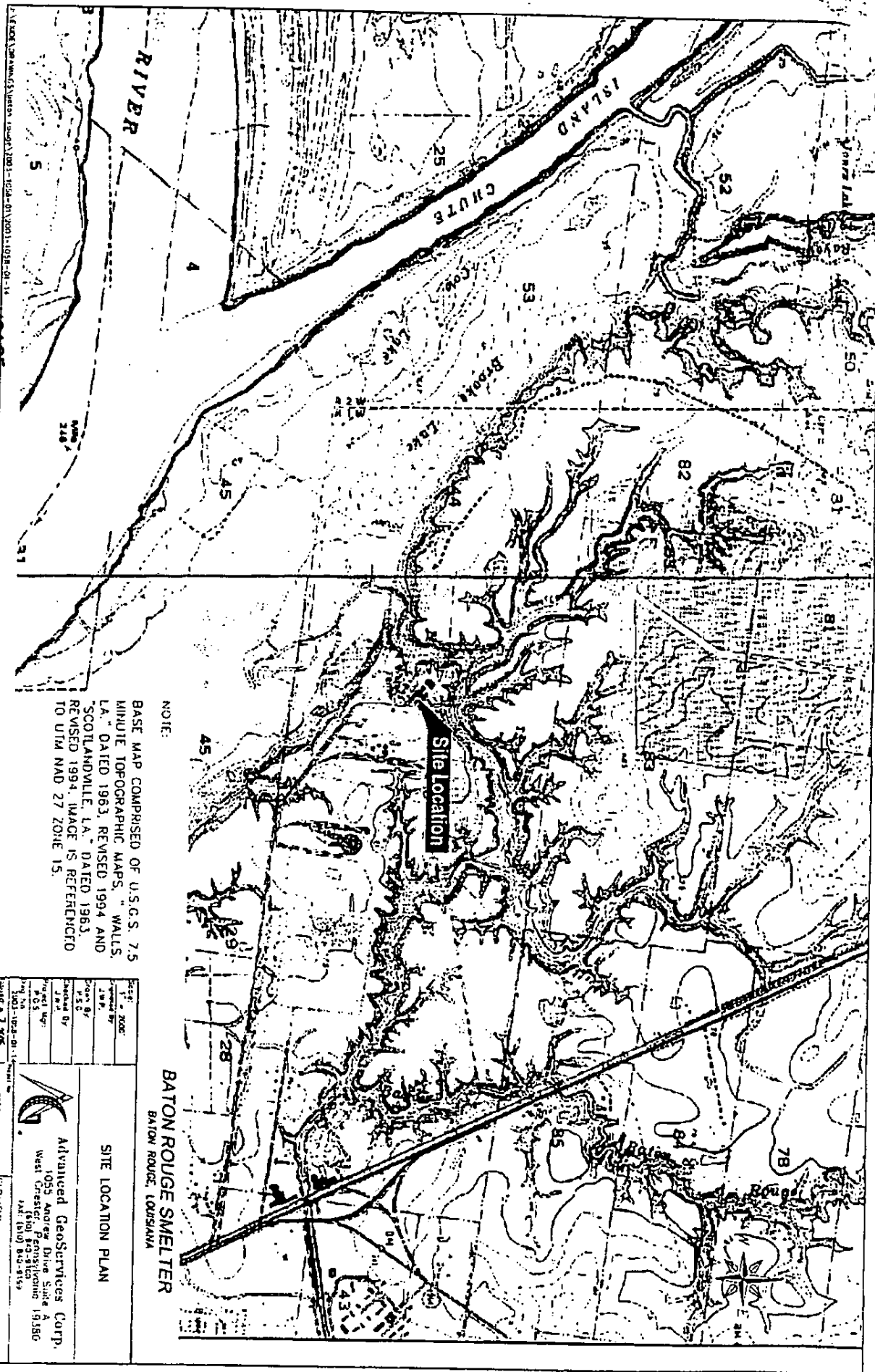
You and your client are advised that this approved jurisdictional determination is valid for a period of 5 years from the date of this letter unless new information warrants revision prior to the expiration date.

Should there be any questions concerning these matters, please contact Mr. Rob Heffner at (504) 862-2274 and reference our Account No. MVN-2005-2794-SU.

Sincerely,

for Ronald J. Ventola  
Chief, Regulatory Branch

Enclosures



**BATON ROUGE SMELTER**  
BATON ROUGE, LOUISIANA

NOTE:

BASE MAP COMPRISED OF U.S.G.S. 7.5  
MINUTE TOPOGRAPHIC MAPS, " WALLS,  
LA." DATED 1963, REVISED 1994 AND  
"SCOTLANDVILLE, LA." DATED 1963.  
REVISED 1994. IMAGE IS REFERENCED  
TO UTM NAD 27 ZONE 15.

USACE  
IHA REV 07 SEP 01

R. HERRICK

S. DIJOSEPH JR. & SONS TECHNOLOGIES

WETLANDS WITHIN 1000' OF SITE LOCATION

(# MW2005-2194)

<p>DATE: 11/20/05 BY: J.H.B. CHECKED BY: J.H.B. PROJECT NO: 1005-1023-01-15 FIGURE: 1</p>		<p><b>SITE LOCATION PLAN</b></p> <p>Advanced Geoservices Corp. 1055 Andrew Drive Suite A West Chester, Pennsylvania 19380 (610) 693-8123 J.H.B. (610) 693-8123</p>
<p>FIGURE: 1</p>		

# NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND REQUEST FOR APPEAL

**Applicant:** Exide Technologies

**File No.:** MVN-2005-2794-SU

**Date:** SEP 11 2006

Attached is:

See Section below

<input type="checkbox"/>	INITIAL PROFFERED PERMIT (Standard Permit or Letter of permission)	A
<input type="checkbox"/>	PROFFERED PERMIT (Standard Permit or Letter of permission)	B
<input type="checkbox"/>	PERMIT DENIAL	C
<input checked="" type="checkbox"/>	APPROVED JURISDICTIONAL DETERMINATION	D
<input type="checkbox"/>	PRELIMINARY JURISDICTIONAL DETERMINATION	E

**SECTION I -** The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at <http://usace.army.mil/inet/functions/cw/cecwo/reg.or> or Corps regulations at 33 CFR Part 331.

**A: INITIAL PROFFERED PERMIT:** You may accept or object to the permit.

- **ACCEPT:** If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- **OBJECT:** If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the district engineer. Your objections must be received by the district engineer within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the district engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the district engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.

**B: PROFFERED PERMIT:** You may accept or appeal the permit

- **ACCEPT:** If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- **APPEAL:** If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

**C: PERMIT DENIAL:** You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

**D: APPROVED JURISDICTIONAL DETERMINATION:** You may accept or appeal the approved JD or provide new information.

- **ACCEPT:** You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice, means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.
- **APPEAL:** If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

**E: PRELIMINARY JURISDICTIONAL DETERMINATION:** You do not need to respond to the Corps regarding the preliminary JD. The Preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also you may provide new information for further consideration by the Corps to reevaluate the JD.

(over)



**SECTION II REQUEST FOR APPEAL or OBJECTIONS TO AN INITIAL PROFFERED PERMIT**

**REASONS FOR APPEAL OR OBJECTIONS:** (Describe your reasons for appealing the decision or your objections to an initial proffered permit in clear concise statements. You may attach additional information to this form to clarify where your reasons objections are addressed in the administrative record.)

**ADDITIONAL INFORMATION:** The appeal is limited to a review of the administrative record, the Corps memorandum for the record of the appeal conference or meeting, and any supplemental information that the review officer has determined is needed to clarify the administrative record. Neither the appellant nor the Corps may add new information or analyses to the record. However, you may provide additional information to clarify the location of information that is already in the administrative record.

**POINT OF CONTACT FOR QUESTIONS OR INFORMATION:**

If you have questions regarding this decision and/or the appeal process you may contact:

John Bruza (504) 862-1288  
Chief, Surveillance and Enforcement Section  
U.S. Army Corps of Engineers  
P.O. Box 60627  
New Orleans, LA 70160

If you only have questions regarding the appeal process you may also contact the Division Engineer through:

Donna M. Jones, P.E.  
U.S. Army Corps of Engineers Division,  
Mississippi Valley  
ATTN: CEMVD-PD-KM  
Post Office Box 80  
Vicksburg, Mississippi 39181-0080  
Telephone: 601/634-5821  
FAX: 601/634-5816

**RIGHT OF ENTRY:** Your signature below grants the right of entry to Corps of Engineers personnel, and any government consultants, to conduct investigations of the project site during the course of the appeal process. You will be provided a 15 day notice of any site investigation, and will have the opportunity to participate in all site investigations.

Signature of appellant or agent.	Date:	Telephone number:
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**JURISDICTIONAL DETERMINATION**  
U.S. Army Corps of Engineers

Revised 8/13/04

**DISTRICT OFFICE:** New Orleans  
**FILE NUMBER:** MVN-2005-2794-SU

**PROJECT LOCATION INFORMATION:**

State: Louisiana  
Parish: East Baton Rouge  
Center coordinates of site (latitude/longitude): NAD-83 30.58383 / 91.23905  
Approximate size of area (parcel) reviewed, including uplands: acres.  
Name of nearest waterway:  
Name of watershed:

**JURISDICTIONAL DETERMINATION**

Completed: Desktop determination ☒ Date: 07 Sept 06  
Site visit(s) ☒ Date(s):

**Jurisdictional Determination (JD):**

- ☒ Preliminary JD - Based on available information, ☐ *there appear to be* (or) ☐ *there appear to be no* "waters of the United States" and/or "navigable waters of the United States" on the project site. A preliminary JD is not appealable (Reference 33 CFR part 331).
- ☒ Approved JD - An approved JD is an appealable action (Reference 33 CFR part 331).  
Check all that apply:
- ☒ There are "navigable waters of the United States" (as defined by 33 CFR part 329 and associated guidance) within the reviewed area. Approximate size of jurisdictional area:
- ☒ There are "waters of the United States" (as defined by 33 CFR part 328 and associated guidance) within the reviewed area. Approximate size of jurisdictional area:
- ☒ There are "isolated, non-navigable, intra-state waters or wetlands" within the reviewed area.  
☒ Decision supported by SWANCC/Migratory Bird Rule Information Sheet for Determination of No Jurisdiction.

**BASIS OF JURISDICTIONAL DETERMINATION:**

- A. Waters defined under 33 CFR part 329 as "navigable waters of the United States":**
- ☒ The presence of waters that are subject to the ebb and flow of the tide and/or are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.
- B. Waters defined under 33 CFR part 328.3(a) as "waters of the United States":**
- ☒ (1) The presence of waters, which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide.
- ☒ (2) The presence of interstate waters including interstate wetlands<sup>1</sup>.
- ☒ (3) The presence of other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate commerce including any such waters (check all that apply):
- ☐ (i) which are or could be used by interstate or foreign travelers for recreational or other purposes.
- ☐ (ii) from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.
- ☐ (iii) which are or could be used for industrial purposes by industries in interstate commerce.
- ☒ (4) Impoundments of waters otherwise defined as waters of the US.
- ☒ (5) The presence of a tributary to a water identified in (1) - (4) above.
- ☒ (6) The presence of territorial seas.
- ☒ (7) The presence of wetlands adjacent<sup>2</sup> to other waters of the US, except for those wetlands adjacent to other wetlands.

**Rationale for the Basis of Jurisdictional Determination (applies to any boxes checked above).**

Wetlands are adjacent to the Profit Island Chute.

**Lateral Extent of Jurisdiction: (Reference: 33 CFR parts 328 and 329)**

- ☒ Ordinary High Water Mark indicated by:
- ☐ clear, natural line impressed on the bank
  - ☐ the presence of litter and debris
  - ☐ changes in the character of soil
  - ☐ destruction of terrestrial vegetation
  - ☐ shelving
  - ☐ other:
- ☒ High Tide Line indicated by:
- ☐ oil or scum line along shore objects
  - ☐ fine shell or debris deposits (foreshore)
  - ☐ physical markings/characteristics
  - ☐ tidal gages
  - ☐ other:
- ☒ Mean High Water Mark indicated by:
- ☐ survey to available datum; ☐ physical markings; ☐ vegetation lines/changes in vegetation types.
- ☒ Wetland boundaries, as shown on the attached wetland delineation map and/or in a delineation report prepared by:

**Basis For Not Asserting Jurisdiction:**

- ☒ The reviewed area consists entirely of uplands.
- ☒ Unable to confirm the presence of waters in 33 CFR part 328(a)(1, 2, or 4-7).
- ☒ Headquarters declined to approve jurisdiction on the basis of 33 CFR part 328.3(a)(3).
- ☒ The Corps has made a case-specific determination that the following waters present on the site are not Waters of the United States:
- ☐ Waste treatment systems, including treatment ponds or lagoons, pursuant to 33 CFR part 328.3.
  - ☐ Artificially irrigated areas, which would revert to upland if the irrigation ceased.
  - ☐ Artificial lakes and ponds created by excavating and/or diking dry land to collect and retain water and which are used exclusively for such purposes as stock watering, irrigation, settling basins, or rice growing.
  - ☐ Artificial reflecting or swimming pools or other small ornamental bodies of water created by excavating and/or diking dry land to retain water for primarily aesthetic reasons.
  - ☐ Water-filled depressions created in dry land incidental to construction activity and pits excavated in dry land for the purpose of obtaining fill, sand, or gravel unless and until the construction or excavation operation is abandoned and the resulting body of water meets the definition of waters of the United States found at 33 CFR 328.3(a).
  - ☐ Isolated, intrastate wetland with no nexus to interstate commerce.
  - ☐ Prior converted cropland, as determined by the Natural Resources Conservation Service. Explain rationale:
  - ☐ Non-tidal drainage or irrigation ditches excavated on dry land. Explain rationale:
  - ☐ Other (explain):

**DATA REVIEWED FOR JURISDICTIONAL DETERMINATION (mark all that apply):**

- ☒ Maps, plans, plots or plat submitted by or on behalf of the applicant.
- ☒ Data sheets prepared/submitted by or on behalf of the applicant.
- ☐ This office concurs with the delineation report, dated \_\_\_\_\_, prepared by (company):
  - ☐ This office does not concur with the delineation report, dated \_\_\_\_\_, prepared by (company):
- ☒ Data sheets prepared by the Corps.
- ☒ Corps' navigable waters' studies:
- ☒ U.S. Geological Survey Hydrologic Atlas:
- ☒ U.S. Geological Survey 7.5 Minute Topographic maps:
- ☒ U.S. Geological Survey 7.5 Minute Historic quadrangles:
- ☒ U.S. Geological Survey 15 Minute Historic quadrangles:
- ☒ USDA Natural Resources Conservation Service Soil Survey:
- ☒ National wetlands inventory maps:
- ☒ State/Local wetland inventory maps:
- ☒ FEMA/FIRM maps (Map Name & Date):
- ☒ 100-year Floodplain Elevation is: \_\_\_\_\_ (NGVD)
- ☒ Aerial Photographs (Name & Date): '95, '98, & '04 aerial infrared
- ☒ Other photographs (Date):
- ☒ Advanced Identification Wetland maps:
- ☒ Site visit/determination conducted on: see Jurisdictional Determination Section at top of previous page
- ☒ Applicable/supporting case law:
- ☒ Other information (please specify):

<sup>1</sup>Wetlands are identified and delineated using the methods and criteria established in the Corps Wetland Delineation Manual (87 Manual) (i.e., occurrence of hydrophytic vegetation, hydric soils and wetland hydrology).

<sup>2</sup>The term "adjacent" means bordering, contiguous, or neighboring. Wetlands separated from other waters of the U.S. by man-made dikes or barriers, natural river berms, beach dunes, and the like are also adjacent.

**RESPONSE  
ATTACHMENT A24**

## **APPENDIX 24**

**The requirements of the Stormwater Pollution Prevention Plan have been incorporated into Appendix 6, RCRA Contingency Plan and Emergency Response Plan**